

Mr. SLIM®

Split-ductless A/C and Heat Pumps



www.mrslim.com

Mr. Slim® Split-ductless Systems: Redefining Comfort



Comfort is a concept many of us notice only when we're either uncomfortable or very relaxed. But at Mitsubishi Electric HVAC Advanced Products Division, all we think about is comfort. Our industry-leading Mr. Slim split-ductless cooling and heating systems reflect this thinking. At home or at work our Mr. Slim systems are designed to make any space inviting and comfortable.

Maybe your home has a room that's always too hot or too cold. Or, perhaps, you're looking for a way to control the climate effectively in multiple rooms in your office building such as in conference rooms. No matter what your cooling and heating needs may be, Mr. Slim systems are the perfect way to transform your home or workplace into a tranquil and productive environment.

Mr. SLIM®
Split-ductless A/C and Heat Pumps

 **MITSUBISHI
ELECTRIC**
HVAC Advanced Products Division



Good for the environment and your bottom line.

- **Eco-friendly refrigerant:** Environmentally-friendly R410A refrigerant offers zero Ozone Depletion Potential (ODP) and allows for higher heat transfer coefficient (COP). This innovative feature means a reduction in equipment size, a reduction in piping size and higher pressure for greater performance. Smaller equipment also means less impact on the environment at the end of the product's life cycle.
- **Standard compliance:** All Mitsubishi Electric HVAC products follow standards and guidelines as set forth by the Energy Star, EPA, ARI, UL, ASHRAE, ETL and ISO.
- **Recycling design:** Our air conditioners are specially designed to allow for easy cleaning, efficient disassembly and more practical recycling. The number of parts used in indoor units has been reduced by adopting modular components, a process which also simplifies materials separation for recycling. To date as much as 84 percent of the materials used to build a Mr. Slim system is recyclable.
- **Smart energy usage:** Mitsubishi Electric INVERTER zoning systems smartly deliver only the amount of capacity needed unlike a typical full-power ON system. Individual indoor air handlers are installed within the zone. These air handlers measure the load for that specific zone and deliver for added efficiency only the capacity needed directly to the space, as compared to energy lost in long duct runs. If the zone is not being used, you do not have to condition the space. Smarter sensing technology and microprocessors enhance the system's ability to measure room temperature accurately for added comfort, performance and efficiency.
- **Minimal impact on landfills:** All air-conditioning products use long-life washable filters.

What is Mr. Slim Split-ductless Technology?

For decades split-ductless air-conditioning and heat pump systems have been the primary solution for cooling and heating interior spaces around the world. Our quiet and powerful Mr. Slim systems have three main components: an indoor unit, an outdoor unit and a remote controller. Installation is as simple as mounting the indoor and outdoor units, connecting the refrigerant lines and making a few electrical connections. An easy installation for your authorized contractor means you will be quickly enjoying the comfort Mr. Slim systems provide.

Why Mr. Slim Systems?

Mitsubishi Electric is without exception the industry leader in split-ductless air-conditioning technology. Our innovations have defined cutting-edge technology for over 28 years. Compare, and you'll see that no one surpasses the Mr. Slim brand's performance for quiet, easy-to-use and energy-efficient operation. And because our split-ductless technology carries the Mitsubishi Electric name, you know every product is built to last. The bottom line is Mr. Slim systems deliver the ultimate in comfort control for your home or office. It's true today and will be comfortably evident for years to come.



Where Can Mr. Slim Products Be Used?

Mr. Slim split-ductless systems are specifically designed to improve the comfort level in an uncomfortably hot or cold room of an existing building. Because Mr. Slim Systems do not require ductwork, they are the perfect cooling and heating systems for renovating older buildings – even those with plaster walls and brick facades that were constructed before air conditioning was available. The versatility and variety of applications for Mr. Slim systems are virtually unlimited. They're an excellent choice for almost any spot-cooling or heating situation, including enclosed sunrooms, upstairs bedrooms, new additions, bonus rooms, finished basements, classrooms, hospitals, nursing homes, restaurants, hotels, workout rooms, computer rooms, offices and churches.

Mr. Slim systems work hard for you even in extreme temperatures, maintaining a toasty, warm environment even when it's as cold as -13° F outside with the Hyper-Heating INVERTER (H2i™) P-Series system. Mr. Slim systems are also equipped with an anti-allergen filter that helps prevent the circulation of air with contaminants. And because the indoor units can be controlled by zone, it is easy to set the controls for the exact room temperature you want within any given space.

How does it work?

Mr. Slim cooling and heating solutions are perfect for almost any space because their innovative engineering optimizes the capabilities of the INVERTER technology and R410A refrigerant for more efficient systems with smaller indoor and outdoor units. R410A refrigerant is environmentally friendly and does not deplete the ozone. The systems themselves are also made of recyclable materials. To find out more about Mr. Slim split-ductless products or to locate an authorized Diamond Dealer near you, visit www.mrslim.com.



GLOSSARY

AIR CONDITIONER: A mechanical device used to control temperature and air movement in a confined space.

Btu/h (British Thermal Units per Hour): A measure of cooling or heating capacity.

CAPACITY or LOAD: A refrigeration rating system usually measured in Btu/h.

COMPRESSOR: A refrigeration or air-conditioning system pump that circulates refrigerant through pipes between an outdoor and indoor unit using pressure.

HEAT PUMP: An air-conditioning system can reverse the direction of refrigerant flow to provide either cooling or heating to the indoor space.

HSPF (Heating Season Performance Factor): A rating of the seasonal efficiency of a heat pump unit when operating in the heating mode.

HVAC: A term which stands for Heating, Ventilation and Air Conditioning.

INDOOR UNIT: The air handler of an air-conditioning system, which contains a heat exchange coil, filters, remote signal receiver and fan and provides conditioned air into the space.

INVERTER TECHNOLOGY: Mitsubishi Electric's MUY, MUZ and all P-Series outdoor units use INVERTER-driven compressor technology (Variable Frequency Drive) to provide exceptional indoor high-speed cooling and heating. By responding to indoor and outdoor temperature changes, these systems reduce power consumption by varying the compressor speed for extra energy savings. The system operates only at the levels needed to maintain a constant and comfortable indoor environment. Our CITY MULTI® product line also incorporates INVERTER technology. (Visit www.mrslim.com for details.)

MICROPROCESSOR: An electrical component consisting of integrated circuits, which may accept, store, control and output information.

OUTDOOR UNIT: A component of an air-conditioning system which contains compressor, propeller fan, circuit board and heat exchange coil. It pumps refrigerant to/from indoor unit.

REFRIGERANT: A gas/liquid substance used to provide cooling by direct absorption of heat. Mitsubishi Electric products use environmentally-friendly R410A refrigerant.

REFRIGERANT LINES: Copper tubing through which refrigerant flows to and from indoor and outdoor units.

SEER (Seasonal Energy Efficiency Ratio): A rating of the seasonal efficiency of air-conditioning or heating units in cooling mode.

SPLIT-DUCTLESS SYSTEM: A system comprised of a remote outdoor condensing unit connected by refrigerant pipes to a matching, non-ducted indoor air handler and a remote controller. Special cases for introducing ventilated air may call for limited ducting to air handler from outside.

INDEX

INVERTER TECHNOLOGY: *Pages 06-07*

M-SERIES: 9,000-36,000 Btu/h

Residential and Select Commercial Applications

Overview of Product Line
Pages 08 - 09

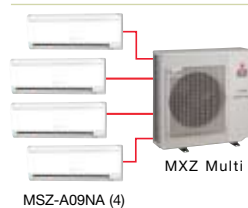
Product Lineup and Technology Descriptions
Pages 10 - 11



MS/MSY SINGLE-ZONE, WALL-MOUNTED:
Air Conditioners
- Specifications
Pages 12 - 13



MSZ SINGLE-ZONE, WALL-MOUNTED:
Air Conditioners and Heat Pumps
- Specifications
Pages 14 - 15



MXZ MULTI-ZONE WALL-MOUNTED:
INVERTER-driven Multi-zone Heat Pumps
- Specifications
Pages 16 - 17

P-SERIES: 12,000-42,000 Btu/h

Commercial, Institutional and Large Residential

Product Lineup and Technology Descriptions
Pages 18 - 19



H2i™ HYPER-HEATING INVERTER:
Heat Pump System
- Specifications
Pages 20 - 23



PKA WALL-MOUNTED:
Air Conditioners and Heat Pumps
- Specifications
Pages 24 - 26



PLA CEILING-RECESSED CASSETTE:
Air Conditioners and Heat Pumps
- Specifications
Pages 27 - 29



PCA CEILING-SUSPENDED:
Air Conditioners and Heat Pumps
- Specifications
Pages 30 - 32



RATING CONDITIONS, REFRIGERANT TUBING
AND LINE LENGTHS: *Page 33*

ACCESSORIES: *Page 34*

LINE-HIDE™ AND DIAMONDBACK™ BALL VALVES:
Page 35

INVERTER

INVERTER-DRIVEN COMPRESSOR TECHNOLOGY

INVERTER Technology for Exceptional Year-round Comfort and Performance

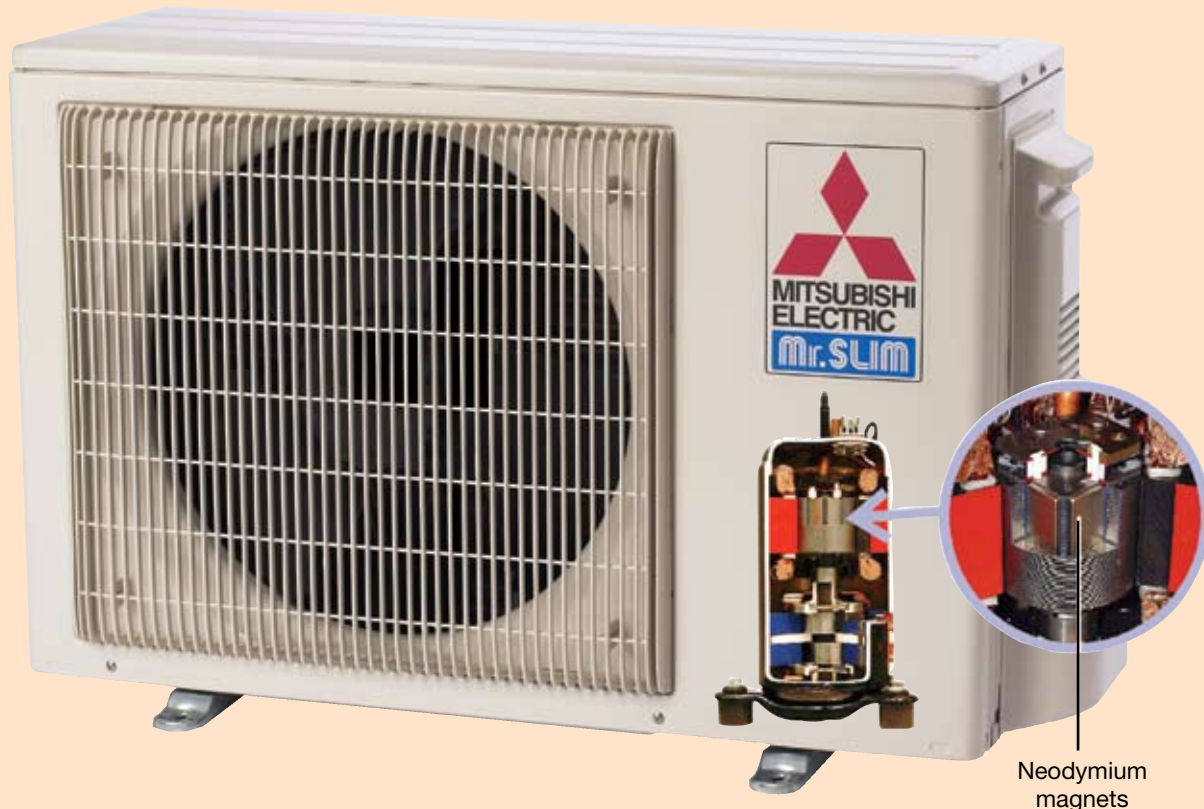
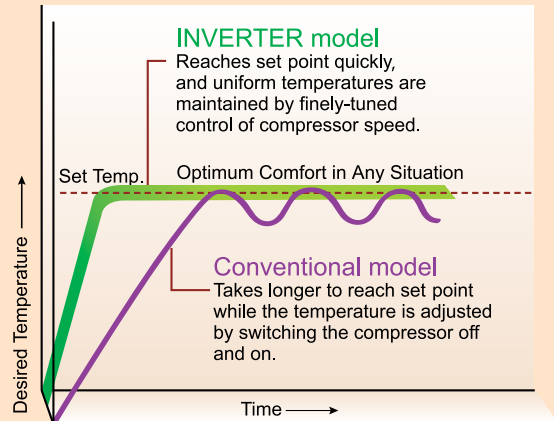
Certain straight-cool and all heat pump outdoor units use Mitsubishi Electric's INVERTER-driven compressor technology (Variable Frequency Drive) to provide exceptional, high-speed cooling and heating performance. Thanks to high rotation speeds, desired temperatures are reached more quickly than with conventional systems so you can enjoy your ideal level of comfort without delay.

Like a car's cruise control, the system varies the compressor speed, which reduces power consumption for extra energy savings. The system adjusts itself precisely to the level needed to maintain a consistently comfortable indoor environment. Precise rotation speed control allows the system to maintain a comfortable, consistent room temperature.

INVERTER

High-speed Performance When You Need It

High rotation compressor speeds cool and heat a room quickly, saving both energy and cash. The compressor speed is controlled to maximize efficiency, changing speeds according to the cooling and heating load of a room.



INVERTER-driven Compressor
(not shown to scale)



INVERTER

Optimum Comfort Year-round

INVERTER-driven systems detect subtle changes in temperature and automatically adjust compressor speed unlike conventional units, which start and stop repetitively. Precise rotation speed efficiently maintains desired temperature, reducing temperature swings, and provides a more comfortable climate.

Extra Energy Savings

For optimum performance INVERTER technology delivers only the energy needed to satisfy the cooling and heating load in a room reducing energy consumption. Our CITY MULTI® VRFZ residential and commercial product line also employs INVERTER technology. Like Mr. Slim products the CITY MULTI INVERTER-driven systems give you increased performance capabilities and design flexibility, making Mitsubishi Electric products the best choice for any of your cooling and heating applications. Visit www.mehvac.com for more information about CITY MULTI technology.



M-SERIES

RESIDENTIAL AND SELECT COMMERCIAL

Comfort is a home that's cool and dry in the summer and cozy and warm in the winter. This environment is what you get with the Mr. Slim system: perfect year-round comfort. The M-Series systems install easily. Mounted high on the wall, the indoor unit blends into most room environments without taking up any window space. These systems also feature automatic cooling/heating change-over, which automatically switches the system between cooling and heating to compensate for fluctuating temperatures. They're nearly silent because their fans deliver air quietly and continuously with only a gentle whoosh for constant circulation and filtration. (This capability is the reason Mr. Slim systems were the first choice for thousands of churches, schools and libraries across the U.S.) Our M-Series systems are the perfect way to cool or heat any room in your home. M-Series INVERTER systems provide high-speed and efficient cooling and heating performance to keep your home consistently cozy year-round.



Superior INVERTER Technology

Now you can benefit from technology that outperforms conventional systems with Mitsubishi Electric's INVERTER technology. Precise rotation speed control helps you keep temperatures consistent. At high rotation speeds you get faster cooling and heating. At low rotation speeds the temperature is efficiently maintained, and starting currents are kept at low levels so they do not affect other appliances. Pulse Amplitude Modulation (PAM) keeps efficiency high by ensuring that the system effectively **uses 98 percent of input power supply.**

No Ductwork Required

Mr. Slim systems require no ductwork, just a small, three-inch opening for two refrigerant lines and control and power wiring to connect the indoor and outdoor units. This feature allows for quicker installation, less mess, and a better-looking and more comfortable space. If you are adding on a room, you don't have to tie into an existing system to steal cool or warm air from other areas in the home. This advanced technology means better room control and increased comfort plus greater efficiency.

Total, Healthy Comfort

The POWERFUL mode is available to cool or heat any desired space quickly by lowering the set temperature in cooling mode or raising the set temperature in heating mode by seven degrees. It increases the fan speed for 15 minutes. Auto changeover maintains consistent temperature in a room by automatically sensing whether the space needs cooling or heating. For challenging cooling environments, low-ambient temperature control means our systems perform effectively in cooling mode even when the external temperatures dip to as low as 14 degrees Fahrenheit. Even more important you can benefit from our anti-allergen filter. Using blue enzymes, this filter helps minimize germs, bacteria, and viruses.

Control Technology

With the new A-Control system the indoor unit is powered through the outdoor unit. Three polarity sensitive wires plus a ground conductor run from the outdoor to the indoor unit providing both power and communication. Advanced wireless remote control is standard on all M-Series models. On the INVERTER-driven units, an option for a wired wall controller is available.

System Control in the Palm of Your Hand

Mr. Slim's M-Series offers a comprehensive remote controller that controls temperature, fan speed and more. Choose from four modes: COOL, HEAT, AUTO and DRY. The controller also has a 12-hour ON/OFF timer for one-button control of your personal comfort. Our new MSY(Z)-A24/D30/D36NA models add the WIDE VANE button to evenly distribute airflow to a wider angle (150 deg.) from right to left, maintaining a comfortable temperature across a wide area. The M-Series INVERTER models can tie into the P-Series wired controller and CITY MULTI® M-NET with adapter to give an *on-the-wall* controller option.

Warm Air, No Drafts

Our hot-start technology provides warmth from the beginning. The fan increases in speed as the coil is warmed, reducing drafts so when you want warm air, you'll get it.



M-Series MSY(Z)-D30NA Model Indoor Unit

Features	Benefits
INVERTER TECHNOLOGY	Maximizes energy savings by making sure only the energy needed to cool or heat an area is used.
NO DUCTWORK	Installs quickly and easily, having no need for major construction and remodeling
ZONE CONTROL	Realizes maximum control and energy efficiency by cooling and heating only those spaces desired
ADVANCED MICROPROCESSOR CONTROLS	Creates a comfortable environment no matter what conditions are outside with our advanced self-monitoring controls
CONVENIENT WIRELESS REMOTE CONTROL	Offers comfort control in the palm of your hand with our remote controller
WASHABLE LONG-LIFE ANTI-ALLERGEN FILTERS	Improves air quality and saves money by being washable rather than replaceable
AUTO COOL/HEAT CHANGEOVER	Switches automatically from cooling to heating
ENVIRONMENTALLY FRIENDLY	Uses R410A, an environmentally-friendly refrigerant.



Wireless M-Series Remote Controller



M-Series MUY(Z)-D30NA Model Outdoor Unit

More Efficiency, More Capacity

The M-Series product line now includes the MSZ-FD09/12NA model series with the highest ductless system rating in the industry at **23 SEER** while being extremely quiet at a low 22dB(A) for the indoor unit. The MSY(Z)-D30/36NA systems bring the largest capacity to date for the M-Series at 2.5- and 3-tons respectively.

For detailed information see the next page.

Cutting-edge Technology

In every aspect of the Mr. Slim system, technology is utilized to make the units more energy-efficient and environmentally friendly while providing innovative comfort control. Our technology includes expanded filter systems, wide vane airflow, the i-see™ sensor and increased energy-efficiency (in select systems).

Refer to the next page for more detailed information.



M-Series Wireless Remote Controller

M-SERIES WALL-MOUNTED A/C LINEUP (cooling only)



MS Non-INVERTER
Air Conditioners
9,500 to 12,000 Btu/h
[pg. 12]



MSY INVERTER
Air Conditioners
15,000 to 34,600 Btu/h
[pgs. 12 - 13]

NEW Large Capacity



MSY(Z)-D30/36NA
INVERTER Air Conditioners
and Heat Pumps
30,700 to 34,600 Btu/h
[pgs. 14 - 15]

Multiple Filters for Cleaner, Healthier Air

Mr. Slim M-Series indoor units use a sophisticated multipart filter system to remove contaminants such as allergens, viruses and bacteria from the air as it circulates.

The hybrid catechin filter absorbs odor-causing gases. A blue-enzyme anti-allergen filter reduces germs, bacteria and viruses and helps trap dust, pollens, mites and other particles; the filter uses an enzyme catalyst to help break down the sulfur atom bonds in allergen proteins, transforming them into non-allergen proteins.

A hybrid-coating process makes the catechin filter washable and – if properly maintained with monthly cleanings – effective for more than 10 years.

The MSZ-FD09/12NA indoor units incorporate the M-Series standard Catechin filter plus two more filters for triple filtration. The second filter, a Blue-Enzyme filter, is a fibrous material, and its enzymes render allergens harmless. The third filter, a Platinum Catalyst Deodorizing filter, that has a ceramic surface absorption element and uses nanotechnology for high power odor absorption. This combination of filter types provides a complete air purifying system along with the ultimate comfort solution.

Energy Efficiency

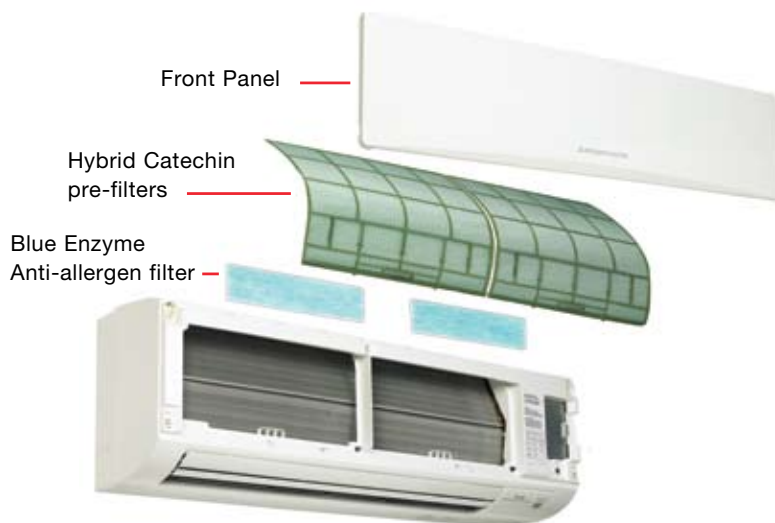
MSZ-FD09/12NA systems produce the highest ductless system ratings in the industry at **23 SEER** while being extremely quiet at a low 22dB(A) for the indoor unit.

The increased energy efficiency, **up to 35 percent over standard Mr. Slim M-Series systems and 70 percent over industry standard requirement of 13 SEER**, is a result of a new powerful magnet rotor that allows for lower current input. With the increased energy efficiency and SEER ratings the MSZ-FD models are **ENERGY STAR® Tier 2 certified**.

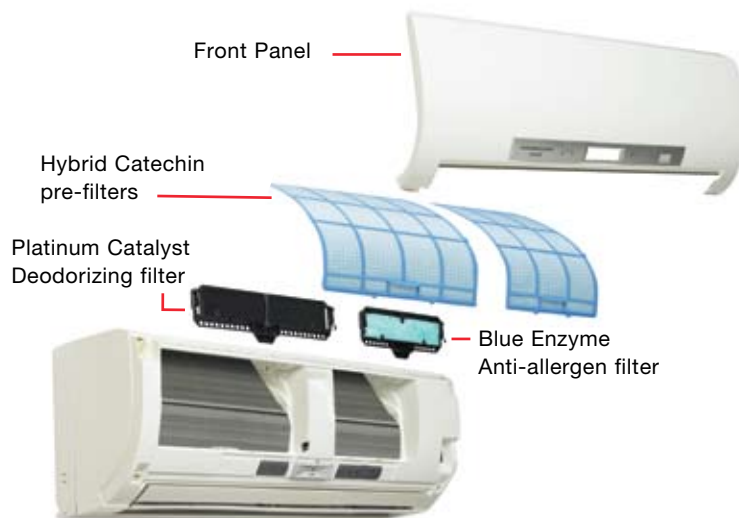
High Heat from Low Energy

Even at 17° F the MSZ-FD09NA models produce 12,500 Btu/h of heat while the MSZ-FD12NA reaches to 13,600 Btu/h. All of this while being extremely energy-efficient.

STANDARD FILTER SYSTEM (MS(Y)-D30NA MODEL SHOWN)



ENHANCED FILTER SYSTEM (MSZ-FD09/12NA MODELS)



NEW Up to 23 SEER



MSZ-FD09/12NA
High-Efficiency
INVERTER Heat Pumps
9,000 and 12,000 Btu/h
[pg. 14]

M-SERIES WALL-MOUNTED HEAT PUMP LINEUP (cooling and heating)



MSZ INVERTER
Heat Pumps
9,000 to 33,200 Btu/h
[pgs. 14 - 15]



MXZ Multi-Zone
INVERTER
Heat Pumps
20,000 to 36,000 Btu/h
[pgs. 16 - 17]



Excellent Air Distribution

With the WIDE VANE or SWING mode, available on the MSY(Z)-A24/D30/36NA, there is an option for seven horizontal airflow directions that provide 150 degrees of airflow for greater conditioned air circulation.



Quiet Operation

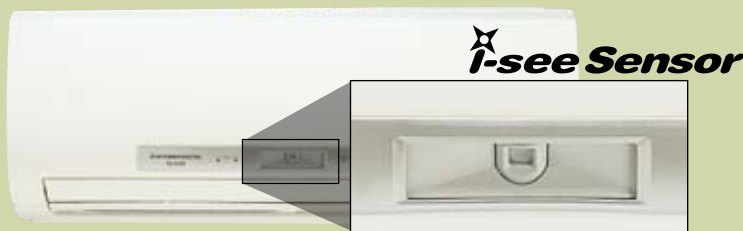
Do you hear that? No? You barely hear our systems because Mr. Slim indoor units operate with nearly a whisper of sound. A police siren, for example, has a sound level of 118 decibels; a circular saw produces 107 decibels of sound. A vacuum cleaner in your home creates 74 decibels of noise. Even a library environment is at 33 decibels while a whisper-tone voice produces 35 decibels. Certain Mr. Slim units operate as low as 22 decibels in low speed and others range from 26 to 34 decibels in low speed, all lower than a whisper-tone voice.

Did you hear that? We hope you did.

source: Friends of Albuquerque's Environmental Story (<http://www.cabq.gov/aes/s5noise.html>)

i-see™ Sensor (MSZ-FD09/12NA models only)

The i-see sensor detects the always troublesome regions of temperature closer to the ceiling and the floor. The i-see sensor also controls the airflow up to a wide 150° lateral angle for ultimate comfort (90° angle in cooling mode) by scanning the room and making adjustments based on the ambient temperature readings. Through this process the MSZ-FD09/12NA systems achieve superior cooling/heating performance with extremely efficient operation.



Multi-zone Heat Pump System Attributes

Multi-zone systems mean that people can enjoy their ideal level of comfort no matter where they are in the home. Each zone operates independently. People in the kitchen, master bedroom or living room can all enjoy the temperatures that makes them feel most comfortable.

If you're looking for a complete comfort solution for several different rooms, the MXZ multi-zone system is the right choice for you. You can use up to 19 different indoor unit combinations so the system is flexible enough to conform to your particular cooling and heating needs with up to four rooms from one outdoor unit.



Lifestyle photo courtesy of
Mitsubishi Digital Electronics America, Inc.
Visit mitsubishitv.com for details.



(MS-A12WA MODEL SHOWN)

MS/MSY COOLING-ONLY

M-SERIES Specifications



INVERTER



NON-INVERTER

Model Name	Indoor Unit		MS-A09WA	MS-A12WA
	Outdoor Unit		MU-A09WA	MU-A12WA
Cooling *1	Rated Capacity	Btu/h	9,500	12,000
	Capacity Range	Btu/h	-	-
	Total Input	W	870	1,070
	Energy Efficiency	SEER	13	
	Moisture Removal	Pints/h	2.7	3.2
Sensible Heat Factor			0.68	0.70
Power Supply	Phase, Cycle, Voltage		1 Phase, 60Hz, 115V *2	
Voltage	Indoor - Outdoor L1 N / S1-S2		AC 115V	
	Indoor - Outdoor L2 / S2-S3		AC 115V	
	Indoor - Remote Controller		Wireless Type	
Indoor Unit	MCA	A	1.2	
	Fan Motor	F.L.A.	0.95	
	Airflow (Lo-Med-Hi)	DRY (CFM)	183-261-335	222-286-406
		WET (CFM)	162-233-300	198-254-363
	Sound Pressure Level (Lo-Med-Hi)	dB(A)	26-32-40	33-38-45
	External Finish Color		Munsell No. 1.0Y 9.2/0.2	
	Dimension Unit	W: In.	30-11/16	
		D: In.	8-1/4	
		H: In.	11-3/4	
	Weight Unit	Lbs.	23	
	Field Drainpipe Size O.D.	In.	5/8	
Outdoor Unit	MCA	A	14	16
	Max. Fuse Size	(Time Delay) A	15	20
	Fan Motor	F.L.A.	0.63	0.93
	Compressor	Model (Type)	Single Rotary	
		R.L.A.	9.3	10.82
		L.R.A.	47	56
	Airflow	CFM	1,083	1,327
	Refrigerant Control		Capillary Tube	
	Sound Pressure Level (Cooling) *1	dB(A)	47	52
	External Finish Color		Munsell No. 3Y 7.8/1.1	
	Dimensions	W: In.	31-1/2	33-7/16
		D: In.	11-1/4	11-7/16
		H: In.	21-5/8	23-13/16
	Weight	Lbs.	78	96
Remote Controller	Type		Wireless Remote	
Refrigerant	Type		R410A	
	Charge	Lbs., Oz.	2, 5	3, 1
	Oil	Type (Fl. Oz.)	NE022 (10.8)	
Refrigerant Pipe	Gas Side O.D.	In.	3/8	1/2
	Liquid Side O.D.		1/4	
	Height Difference (Max.)	Ft.	35	
	Length (Max.)		65	
Connection Method	Indoor/Outdoor		Flared/Flared	

MSY-A15NA	MSY-A17NA
MUY-A15NA	MUY-A17NA
15,000	16,200
3,100-15,000	3,100-16,200
1,690 (210-1,690)	2,070 (210-2,070)
16	
4.7	5.1
0.65	
1 Phase, 60Hz, 208/230V *2	
AC 208-230V	
DC12-24V	
Wireless Type (Optional Wired Controller: DC12V)	
1.0	
0.76	
268-328-381	
240-293-342	
34-40-45	34-40-46
Munsell No. 1.0Y 9.2/0.2	
30-11/16	
8-1/4	
11-3/4	
23	
5/8	
14	
15	
0.52	
DC INVERTER-driven Twin Rotary	
10.1	
12	
1,249	
Linear Expansion Valve	
50	52
Munsell No. 3Y 7.8/1.1	
31-1/2	
11-1/4	
21-5/8	
88	
Wireless Remote (Optional Wired Controller)	
R410A	
2, 7	
NE022 (15.2)	
1/2	
1/4	
40	
65	
Flared/Flared	

NOTES: Test conditions are based on ARI 210/240.

*1 Rating conditions (cooling) - Indoor D.B. 80° F (27° C), W.B. 67° F (19° C); Outdoor: D.B. 95° F (35° C), W.B. 75° F (24° C).

*2 Indoor units receive power from outdoor units through field-supplied interconnected wiring.

Specifications are subject to change without notice.

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.



(MS-A12WA MODEL SHOWN)

INVERTER



MSY COOLING-ONLY (CONT.)

M-SERIES Specifications

Model Name	Indoor Unit		MSY-A24NA	MSY-D30NA	MSY-D36NA
	Outdoor Unit		MUY-A24NA	MUY-D30NA	MUY-D36NA
Cooling *1	Rated Capacity	Btu/h	22,000	30,700	34,600
	Capacity Range	Btu/h	4,400-22,000	9,800-30,700	9,800-34,600
	Total Input	W	2,880 (290-2,880)	3,380 (620-3,380)	4,240 (620-4,240)
	Energy Efficiency	SEER	16		15.1
	Moisture Removal	Pints/h	7.3	9.9	11.9
	Sensible Heat Factor		0.63	0.64	0.62
Power Supply	Phase, Cycle, Voltage		1 Phase, 60Hz, 208/230V *2		
Voltage	Indoor - Outdoor S1-S2		AC 208-230V		
	Indoor - Outdoor S2-S3		DC12-24		
	Indoor - Remote Controller		Wireless Type (Optional Wired Controller: DC12V)		
Indoor Unit	MCA	A	1.0		
	Fan Motor	F.L.A.	0.76		
	Airflow (Lo-Med-Hi) *1	DRY (CFM)	296-431-568	389-639-848	
		WET (CFM)	265-385-508	350-576-763	
	Sound Pressure Level (Lo-Med-Hi) *1	dB(A)	34-40-49	32-42-49	
	External Finish Color		Munsell No. 1.0Y 9.2/0.2		
	Dimension Unit	W: In.	43-5/16	46-1/16	
		D: In.	10-1/4	11-5/8	
		H: In.	12-13/16	14-3/8	
	Weight Unit	Lbs.	37	40	
Field Drainpipe Size O.D.	In.	5/8			
Outdoor Unit	MCA	A	17	21	
	MOCP	A	20	25	
	Fan Motor	F.L.A.	0.93		
	Compressor	Model (Type)	DC INVERTER-driven Twin Rotary		
		R.L.A.	10.1	16	
		L.R.A.	16	20	
	Airflow	CFM	1,729	1,941	
	Refrigerant Control		Linear Expansion Valve		
	Sound Pressure Level (Cooling) *1	dB(A) *1	55		
	External Finish Color		Munsell No. 3Y 7.8/1.1		
	Dimensions	W: In.	33-1/16	33-1/16	
		D: In.	13	13	
		H: In.	33-7/16	33-7/16	
	Weight	Lbs.	128	126	
Remote Controller	Type		Wireless Remote		
Refrigerant	Type		R410A		
	Charge	Lbs., Oz.	4		
	Oil	Type (Fl. Oz.)	NEO22 (15.2)	NEO22 (29)	
Refrigerant Pipe	Gas Side O.D.	In.	5/8		
	Liquid Side O.D.		1/4	3/8	
	Height Difference (Max.)	Ft.	50		
	Length (Max.)		100		
Connection Method	Indoor/Outdoor		Flared/Flared		

NOTES: Test conditions are based on ARI 210/240.

*1 Rating conditions (cooling) - Indoor D.B. 80° F (27° C), W.B. 67° F (19° C); Outdoor: D.B. 95° F (35° C), W.B. 75° F (24° C).

*2 Indoor units receive power from outdoor units through field-supplied interconnected wiring.

Specifications are subject to change without notice.

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.



(MSZ-FD12NA MODEL SHOWN)

INVERTER



MSZ HEAT PUMP

M-SERIES Specifications



Model Name	Indoor Unit		MSZ-A09NA	MSZ-FD09NA	MSZ-A12NA	MSZ-FD12NA
	Outdoor Unit		MUZ-A09NA	MUZ-FD09NA	MUZ-A12NA	MUZ-FD12NA
Cooling *1	Rated Capacity	Btu/h	9,000	9,000	12,000	12,000
	Capacity Range	Btu/h	5,500-9,000	2,800-9,000	5,700-12,000	2,800-12,000
	Total Input	W	690 (390-690)	650 (160-650)	1,170 (395-1,170)	960 (160-960)
	Energy Efficiency	SEER	17	23	17	22
	Moisture Removal	Pints/h	2.3	2.1	3.2	2.9
	Sensible Heat Factor		0.71	0.76	0.70	0.73
Heating at 47° F *2	Rated Capacity	Btu/h	10,900	10,900	13,600	13,600
	Capacity Range	Btu/h	5,200-12,600	3,000-18,000	5,200-13,600	3,000-21,000
	Total Input	W	860 (350-1,100)	750 (150-2,400)	1,160 (350-1,160)	980 (150-2,400)
	HSPF (Region IV)	Btu/h/W	8.2	10.55	8.2	10.55
Heating at 17° F *3	Capacity	Btu/h	7,700	12,500	8,300	13,600
	Total Input	W	880	1,730	930	1,780
Power Supply	Phase, Cycle, Voltage		1 Phase, 60Hz, 208/230V *4			
Voltage	Indoor - Outdoor S1-S2		AC 208-230V			
	Indoor - Outdoor S2-S3		DC12-24V			
	Indoor - Remote Controller		Wireless Type (Optional Wired Controller: DC12V)			
Indoor Unit	MCA	A	1.0			
	Fan Motor	F.L.A.	0.76			
	Airflow (Cool)	DRY (CFM)	152-229-307	162-226-339	152-240-353	162-226-381
	(Lo-Med-Hi) *1	WET (CFM)	134-205-275	144-202-307	134-215-318	144-202-350
	Airflow (Heat) (Lo-Med-Hi) *2	DRY (CFM)	159-222-307	166-240-367	159-240-353	166-240-399
	Sound Pressure Level (Cooling) (Lo-Med-Hi) *1	dB(A)	22-33-38	22-31-39	22-34-42	22-33-43
	Sound Level Pressure (Heating) (Lo-Med-Hi) *2		22-33-38	22-31-40	22-34-42	22-33-43
	External Finish Color		Munsell No. 1.0Y 9.2/0.2			
	Dimension Unit	W: In.	30-11/16	31-7/16	30-11/16	31-7/16
		D: In.	8-1/4	10-1/8	8-1/4	10-1/8
		H: In.	11-3/4	11-5/8	11-3/4	11-5/8
	Weight Unit	Lbs.	23	27	23	27
	Field Drainpipe Size O.D.	In.	5/8			
	Outdoor Unit	MCA	A	12		
MOCP		A	15			
Fan Motor		F.L.A.	0.52	0.56	0.52	0.56
Compressor		Model (Type)	DC INVERTER-driven Twin Rotary			
		R.L.A.	7.8	8.6	7.8	8.6
		L.R.A.	9.2	10.8	9.2	10.8
Airflow		CFM	1,129	1,102/1,187	1,094	1,102/1,187
Refrigerant Control		Linear Expansion Valve				
Defrost Method		Reverse Cycle				
Sound Pressure Level		dB(A) *1	48			
External Finish Color		Munsell No. 3Y 7.8/1.1				
Dimensions		W: In.	31-1/2			
		D: In.	11-1/4			
		H: In.	21-5/8			
Weight		Lbs.	75	80	82	80
Remote Controller	Type		Wireless Remote (Optional Wired Controller)			
Refrigerant	Type		R410A			
	Charge	Lbs., Oz.	2	2, 9	2, 5	2, 9
	Oil	Type (Fl. Oz.)	NE022 (10.8)	NE022 (29)	NE022 (10.8)	NE022 (29)
Refrigerant Pipe	Gas Side O.D.	In.	3/8			
	Liquid Side O.D.		1/4			
	Height Difference (Max.)	Ft.	40			
	Length (Max.)		65			
Connection Method	Indoor/Outdoor		Flared/Flared			

NOTES: Test conditions are based on ARI 210/240.

*1 Rating conditions (cooling)-Indoor: D.B. 80° F (27° C), W.B. 67° F (19° C); Outdoor: D.B. 95° F (35° C), W.B. 75° F (24° C).

*2 Rating conditions (heating)-Indoor: D.B. 70° F (21° C), W.B. 60° F (16° C); Outdoor: D.B. 47° F (8° C), W.B. 43° F (6° C).

*3 Rating conditions (heating)-Indoor: D.B. 70° F (21° C), W.B. 60° F (16° C); Outdoor: D.B. 17° F (-8° C), W.B. 15° F (-9° C).

*4 Indoor units receive power from outdoor units through field-supplied interconnected wiring.

Specifications are subject to change without notice.

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.



(MSY(Z)-D30NA MODEL SHOWN)

INVERTER



MSZ HEAT PUMP (CONT.)

M-SERIES Specifications

Model Name	Indoor Unit		MSZ-A15NA	MSZ-A17NA	MSZ-A24NA	MSZ-D30NA	MSZ-D36NA
	Outdoor Unit		MUZ-A15NA	MUZ-A17NA	MUZ-A24NA	MUZ-D30NA	MUZ-D36NA
Cooling *1	Rated Capacity	Btu/h	15,000	16,200	22,000	30,700	33,200
	Capacity Range	Btu/h	3,100-15,000	3,100-16,200	4,400-22,000	9,800-30,700	9,800-33,200
	Total Input	W	1,690 (210-1,690)	2,070 (210-2,070)	2,880 (290-2,880)	3,850 (620-3,850)	4,360 (620-4,360)
	Energy Efficiency	SEER	16		16	14.5	
	Moisture Removal	Pints/h	4.7	5.1	7.3	9.9	11.3
	Sensible Heat Factor		0.65		0.63	0.64	0.62
Heating at 47° F *2	Rated Capacity	Btu/h	18,000	20,100	23,200	32,600	35,200
	Capacity Range	Btu/h	3,400-20,900		3,600-24,400	8,700-34,000	8,700-36,000
	Total Input	W	1,790 (250-2,330)	2,150 (250-2,330)	2,350 (260-2,570)	3,360 (520-3,600)	3,840 (520-4,100)
	HSPF (Region IV)	Btu/h/W	8.2	8.2	8.2		
Heating at 17° F *3	Capacity	Btu/h	13,000		15,200	20,800	22,800
	Total Input	W	1,740		1,960	2,620	3,000
Power Supply	Phase, Cycle, Voltage 1 Phase, 60Hz, 208/230V *4						
Voltage	Indoor - Outdoor S1-S2		AC 208-230V				
	Indoor - Outdoor S2-S3		DC12-24				
	Indoor - Remote Controller		Wireless Type (Optional Wired Controller: DC12V)				
Indoor Unit	MCA	A	1.0				
	Fan Motor	F.L.A.	0.76				
	Airflow (Cool) (Lo-Med-Hi) *1	DRY (CFM) WET (CFM)	268-328-381 240-293-342		296-431-568 265-385-508	389-639-848 350-576-763	
	Airflow (Heat) (Lo-Med-Hi) *2	DRY (CFM)	254-314-381		296-486-568	445-639-848	
	Sound Pressure Level (Cooling) (Lo-Med-Hi) *1	dB(A)	34-40-45	34-40-46	34-40-49	32-42-49	
	Sound Level Pressure (Heating) (Lo-Med-Hi) *2		34-38-44		34-40-48	34-42-49	
	External Finish Color		Munsell No. 1.0Y 9.2/0.2				
	Dimension Unit	W: In.	30-11/16	30-11/16	43-5/16	46-1/16	
		D: In.	8-1/4	8-1/4	10-1/4	11-5/8	
		H: In.	11-3/4	11-3/4	12-13/16	14-3/8	
	Weight Unit	Lbs.	23	23	37	40	
	Field Drainpipe Size O.D.	In.	5/8				
	Outdoor Unit	MCA	A	14		17	21
MOCP		A	15		20	25	
Fan Motor		F.L.A.	0.52	0.52	0.93		
Compressor		Model (Type)	DC INVERTER-driven Twin Rotary				
		R.L.A.	10.1			16	
		L.R.A.	12	16	20		
Airflow		CFM	1,249		1,729	1,941	
Refrigerant Control		Linear Expansion Valve					
Defrost Method		Reverse Cycle					
Sound Pressure Level		dB(A) *1	50	52	55	56	
External Finish Color		Munsell No. 3Y 7.8/1.1					
Dimensions		W: In.	31-1/2		33-1/16		
		D: In.	11-1/4		13		
		H: In.	21-5/8		33-7/16	33-7/16	
Weight		Lbs.	88		128	141	
Remote Controller	Type		Wireless Remote				
Refrigerant	Type		R410A				
	Charge	Lbs., Oz.	2, 7		4	4, 10	
	Oil	Type (Fl. Oz.)	NE022 (15.2)		NEO 22(15.2)	NE022 (29)	
Refrigerant Pipe	Gas Side O.D.	In.	1/2		5/8	5/8	
	Liquid Side O.D.		1/4		3/8		
	Height Difference (Max.)	Ft.	40		50		
	Length (Max.)		65		100		
Connection Method	Indoor/Outdoor		Flared/Flared				

NOTES: Test conditions are based on ARI 210/240.

*1 Rating conditions (cooling)-Indoor: D.B. 80° F (27° C), W.B. 67° F (19° C); Outdoor: D.B. 95° F (35° C), W.B. 75° F (24° C).

*2 Rating conditions (heating)-Indoor: D.B. 70° F (21° C), W.B. 60° F (16° C); Outdoor: D.B. 47° F (8° C), W.B. 43° F (6° C).

*3 Rating conditions (heating)-Indoor: D.B. 70° F (21° C), W.B. 60° F (16° C); Outdoor: D.B. 17° F (-8° C), W.B. 15° F (-9° C).

*4 Indoor units receive power from outdoor units through field-supplied interconnected wiring.

Specifications are subject to change without notice.

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.



(MSZ-A12NA MODEL SHOWN)

MXZ-MULTI INVERTER HEAT PUMP

M-SERIES Specifications

INVERTER



Model Name	Outdoor Unit		MXZ-2A20NA *5	MXZ-3A30NA *6	MXZ-4A36NA *7	
Indoor Unit	Cooling *1	Rated Capacity	Btu/h	20,000	28,400	36,000
		Capacity Range	Btu/h	7,800-20,000	12,600-28,400	12,600-36,400
		Total Input	W	2,150 (630-2,150)	3,250 (1,000-3,250)	3,820 (1,000-3,900)
	Heating at 47° F *2	Rated Capacity	Btu/h	22,000	28,600	36,000
		Capacity Range	Btu/h	8,500-22,000	11,400-36,000	11,400-43,000
		Total Input	W	1,780 (520-1,780)	2,180 (740-2,880)	3,100 (740-4,350)
	Heating at 17° F *3	Capacity	Btu/h	14,500	18,800	24,600
		Total Input	W	1,500	2,120	3,340
Power Supply	Phase,Cycle,Voltage		1 Phase, 60Hz, 208-230V *8			
Voltage	Indoor - Outdoor S1-S2		AC 208-230V			
	Indoor - Outdoor S2-S3		DC12-24V			
Outdoor Unit *4	MCA		A	15		19
	MOCP		A	20		
	Fan Motor		F.L.A.	0.96	0.93	
	Compressor	Model (Type)		DC INVERTER-driven Twin Rotary		
		R.L.A.		10.1	11	14.4
		L.R.A.		15		
	Airflow (Cooling/Heating) *1/*2		CFM	1,485/1,640	1,365/1,605	2,068/2,068
	Refrigerant Control		Linear Expansion Valve			
	Defrost Method		Reverse Cycle			
	Sound Pressure Level (Cooling/Heating) *1/*2		dB(A)	49/51	49/49	54/57
	External Finish Color		Munsell No. 5Y 8/1		Munsell No. 3Y 7.8/1.1	
	Dimensions	W: In.	33-1/16	35-7/16		
		D: In.	13 (+1-3/16)	12-5/8 (+1-3/16)		
		H: In.	27-15/16	35-7/16		
	Weight		Lbs.	130	148	150
	Remote Controller	Type		Wireless Remote		
Refrigerant	Type		R410A			
	Charge	Lbs., Oz.	5/15	7/11	8/13	
	Oil	Type (Fl. Oz.)	NEO22 (23.7)			
Refrigerant Pipe	Gas Side O.D.	In.	A, B: 3/8		A: 1/2; B, C: 3/8	A: 1/2; B, C, D: 3/8
	Liquid Side O.D.	In.	1/4			
	Height Difference (Max.)	Ft.	49/33 *9			
	Length (Max.)		164 (A+B)	230 (A+B+C)	230 (A+B+C+D)	
	Length (Each Indoor Unit)		82			
Connection Method	Indoor/Outdoor		Flared/Flared			

NOTES: Test conditions are based on ARI 210/240. One indoor unit is turned off during low-speed testing under the new test conditions. **Systems actually exhibit higher energy efficiencies during normal operation.**

*1 Rating conditions (cooling)-Indoor: D.B. 80° F (27° C), W.B. 67° F (19° C); Outdoor: D.B. 95° F (35° C), W.B. 75° F (24° C).

*2 Rating conditions (heating)-Indoor: D.B. 70° F (21° C), W.B. 60° F (16° C); Outdoor: D.B. 47° F (8° C), W.B. 43° F (6° C).

*3 Rating conditions (heating)-Indoor: D.B. 70° F (21° C), W.B. 60° F (16° C); Outdoor: D.B. 17° F (-8° C), W.B. 15° F (-9° C).

*4 Refer to pages 12 and 13 for Indoor Unit specifications.

*5 Data from combination of Indoor Units MSZ-A09NA and MSZ-A12NA.

*6 Data from combination of Indoor Units MSZ-A09NA, MSZ-A09NA and MSZ-A12NA.

*7 Data from combination of four MSZ-A09NA Indoor Units.

*8 Indoor units receive power from outdoor units through field-supplied interconnected wiring.

*9 49' Applies to installations where the outdoor unit is installed below the indoor unit.

Power factor equals 97 percent.

Specifications are subject to change without notice.

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts. (Diamond Dealers add one year to parts warranty.)

MXZ-3A30NA Combinations

Indoor Unit Combinations (Unit A + Unit B + Unit C)	Cooling Capacity (Btu/h)				Power Usage (W)	Energy Efficiency		Current (A)		Port Adapter Requirements	
	Heating Capacity (Btu/h)									Size	Quantity and Port Adapter Part No.
	Unit A	Unit B	Unit C	Total		SEER	HSPF	208V	230V		
MSZ-A09NA + MSZ-A09NA	9,000 10,900	9,000 10,900	— —	18,000 21,800	1,800 1,700	16.0	10.0	8.92 8.43	8.07 7.62		N.A.
MSZ-A09NA + MSZ-A12NA	9,000 10,900	12,000 13,600	— —	21,000 24,500	2,000 1,980			9.91 9.81	8.96 8.87		
MSZ-A09NA + MSZ-A15NA	9,000 10,100	15,000 16,900	— —	24,000 27,000	2,500 2,200	16.0	10.0	12.39 10.90	11.21 9.86		N.A.
MSZ-A09NA + MSZ-A17NA	9,000 9,300	16,200 17,700	— —	25,200 27,000	2,700 2,200			16.0	10.0		
MSZ-A09NA + MSZ-A24NA	7,600 7,300	20,400 19,700	— —	28,000 27,000	3,200 1,980	16.0	10.0			15.86 9.81	14.34 8.87
MSZ-A12NA + MSZ-A12NA	12,000 13,500	12,000 13,500	— —	24,000 27,000	2,500 2,200			16.0	10.0	12.39 10.90	11.21 9.86
MSZ-A12NA + MSZ-A15NA	11,500 12,000	14,500 15,000	— —	26,000 27,000	2,800 2,160	16.0	10.0			13.88 10.71	12.55 9.68
MSZ-A12NA + MSZ-A17NA	10,800 11,200	15,200 15,800	— —	26,000 27,000	2,800 2,140			16.0	10.0	13.88 10.61	12.55 9.59
MSZ-A15NA + MSZ-A15NA	13,000 13,500	13,000 13,500	— —	26,000 27,000	2,800 2,120	16.0	10.0			13.88 10.51	12.55 9.50
MSZ-A15NA + MSZ-A17NA	12,200 12,700	13,800 14,300	— —	26,000 27,000	2,800 2,110			16.0	10.0	13.88 10.46	12.55 9.46
MSZ-A17NA + MSZ-A17NA	13,000 13,500	13,000 13,500	— —	26,000 27,000	2,800 2,100	16.0	10.0			13.88 10.41	12.55 9.41
MSZ-A09NA + MSZ-A09NA + MSZ-A09NA	9,000 9,500	9,000 9,500	9,000 9,500	27,000 28,500	2,860 2,180			16.0	10.0	14.18 10.80	12.82 9.77
MSZ-A09NA + MSZ-A09NA + MSZ-A12NA	8,500 8,600	8,500 8,600	11,400 11,400	28,400 28,600	3,250 2,180	16.0	10.0			16.11 10.80	14.57 9.77
MSZ-A09NA + MSZ-A09NA + MSZ-A15NA	7,750 7,800	7,750 7,800	12,900 13,000	28,400 28,600	3,250 2,180			16.0	10.0	16.11 10.80	14.57 9.77
MSZ-A09NA + MSZ-A09NA + MSZ-A17NA	7,300 7,350	7,300 7,350	13,800 13,900	28,400 28,600	3,250 2,180	16.0	10.0			16.11 10.80	14.57 9.77

Specifications are subject to change without notice.

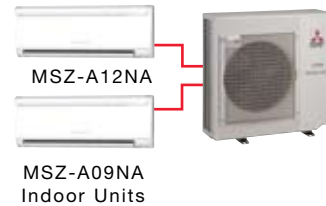
MXZ-2A20NA Combinations

Indoor Unit (Unit A + Unit B) Combinations	Cooling Capacity (Btu/h)			Power Usage (W)	Energy Efficiency		Current (A)	
	Heating Capacity (Btu/h)							
	Unit A	Unit B	Total		SEER	HSPF	208V	230V
MSZ-A09NA + MSZ-A09NA	9,000	9,000	18,000	1,740	16.0	8.5	8.62	7.8
	10,900	10,900	21,800	1,820			9.02	8.16
MSZ-A09NA + MSZ-A12NA	8,500	11,500	20,000	2,150	16.0	8.5	10.66	9.64
	9,500	12,500	22,000	1,780			8.82	7.98
MSZ-A09NA + MSZ-A15NA*	7,500	12,500	20,000	2,150	16.0	8.5	10.66	9.64
	8,250	13,750	22,000	1,780			8.82	7.98
MSZ-A12NA + MSZ-A12NA	10,000	10,000	20,000	2,150	16.0	8.5	10.66	9.64
	11,000	11,000	22,000	1,780			8.82	7.98

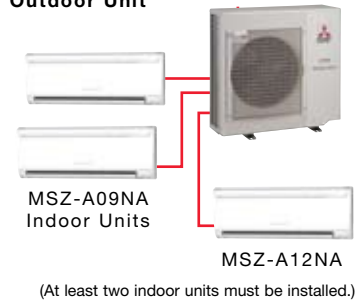
*Port Adapter size = 3/8" x 1/2", Qty = 1, Part No. = MAC-A454JP-E

Specifications are subject to change without notice.

MXZ-2A20NA (2:1) Outdoor Unit



MXZ-3A30NA (3:1, 2:1) Outdoor Unit



- Refer to combination chart for port adaptor references -

MXZ-4A36NA (4:1, 3:1) Outdoor Unit



MXZ-4A36NA Combinations

Indoor Unit Combinations (Unit A + Unit B + Unit C + Unit D)	Cooling Capacity (Btu/h)					Power Usage (W)	Energy Efficiency		Current (A)		Port Adapter Requirements	
	Heating Capacity (Btu/h)						SEER	HSPF	208V	230V	Size	Quantity and Port Adapter Part No.
	Unit A	Unit B	Unit C	Unit D	Total							
MSZ-A09NA + MSZ-A09NA + MSZ-A09NA	9,000	9,000	9,000	—	27,000	2,860	16.0	8.5	14.18	12.82	N.A.	
	10,800	10,800	10,800	—	32,400	2,700			13.38	12.10		
MSZ-A09NA + MSZ-A09NA + MSZ-A12NA	9,000	9,000	12,000	—	30,000	3,270	16.0	8.5	16.21	14.66	N.A.	
	10,000	10,000	12,400	—	32,400	2,700			13.38	12.10		
MSZ-A09NA + MSZ-A09NA + MSZ-A15NA	8,800	8,800	14,500	—	32,100	3,500	16.0	8.5	17.35	15.69	N.A.	
	8,900	8,900	14,600	—	32,400	2,700			13.38	12.10		
MSZ-A09NA + MSZ-A09NA + MSZ-A17NA	8,200	8,200	15,700	—	32,100	3,500	16.0	8.5	17.35	15.69	N.A.	
	8,400	8,400	15,600	—	32,400	2,700			13.38	12.10		
MSZ-A09NA + MSZ-A09NA + MSZ-A24NA	6,900	6,900	18,300	—	32,100	3,500	16.0	8.5	17.35	15.69	3/8 X 5/8" or 1/2 X 5/8"	(1) PAC-SG76RJ-E or (1) MAC-A456JP-E
	7,800	7,800	16,800	—	32,400	2,700			13.38	12.10		
MSZ-A09NA + MSZ-A12NA + MSZ-A12NA	8,700	11,700	11,700	—	32,100	3,500	16.0	8.5	17.35	15.69	N.A.	
	9,400	11,500	11,500	—	32,400	2,700			13.38	12.10		
MSZ-A09NA + MSZ-A12NA + MSZ-A15NA	8,000	10,700	13,400	—	32,100	3,500	16.0	8.5	17.35	15.69	N.A.	
	8,300	10,400	13,700	—	32,400	2,700			13.38	12.10		
MSZ-A09NA + MSZ-A12NA + MSZ-A17NA	7,600	10,100	14,400	—	32,100	3,500	16.0	8.5	17.35	15.69	N.A.	
	7,900	9,900	14,600	—	32,400	2,700			13.38	12.10		
MSZ-A09NA + MSZ-A15NA + MSZ-A15NA	7,500	12,300	12,300	—	32,100	3,500	16.0	8.5	17.35	15.69	3/8 X 1/2"	(1) MAC-A454JP-E
	7,600	12,400	12,400	—	32,400	2,700			13.38	12.10		
MSZ-A09NA + MSZ-A15NA + MSZ-A17NA	7,100	11,700	13,300	—	32,100	3,500	16.0	8.5	17.35	15.69	3/8 X 1/2"	(1) MAC-A454JP-E
	7,200	11,900	13,300	—	32,400	2,700			13.38	12.10		
MSZ-A09NA + MSZ-A17NA + MSZ-A17NA	6,700	12,700	12,700	—	32,100	3,500	16.0	8.5	17.35	15.69	3/8 X 1/2"	(1) MAC-A454JP-E
	7,000	12,700	12,700	—	32,400	2,700			13.38	12.10		
MSZ-A12NA + MSZ-A12NA + MSZ-A12NA	10,700	10,700	10,700	—	32,100	3,500	16.0	8.5	17.35	15.69	N.A.	
	10,800	10,800	10,800	—	32,400	2,700			13.38	12.10		
MSZ-A12NA + MSZ-A12NA + MSZ-A15NA	9,900	9,900	12,300	—	32,100	3,500	16.0	8.5	17.35	15.69	N.A.	
	9,700	9,700	13,000	—	32,400	2,700			13.38	12.10		
MSZ-A12NA + MSZ-A12NA + MSZ-A17NA	9,400	9,400	13,300	—	32,100	3,500	16.0	8.5	17.35	15.69	N.A.	
	9,300	9,300	13,800	—	32,400	2,700			13.38	12.10		
MSZ-A12NA + MSZ-A15NA + MSZ-A15NA	9,100	11,500	11,500	—	32,100	3,500	16.0	8.5	17.35	15.69	3/8 X 1/2"	(1) MAC-A454JP-E
	9,000	11,700	11,700	—	32,400	2,700			13.38	12.10		
MSZ-A09NA + MSZ-A09NA + MSZ-A09NA + MSZ-A09NA	9,000	9,000	9,000	9,000	36,000	3,820	16.0	8.5	18.55	16.78	1/2 X 3/8"	(1) MAC-A455JP-E
	9,000	9,000	9,000	9,000	36,000	3,100			15.05	13.61		
MSZ-A09NA + MSZ-A09NA + MSZ-A09NA + MSZ-A12NA	8,300	8,300	8,300	11,100	36,000	3,820	16.0	8.5	18.55	16.78	1/2 X 3/8"	(1) MAC-A455JP-E
	8,300	8,300	8,300	11,100	36,000	3,100			15.05	13.61		
MSZ-A09NA + MSZ-A09NA + MSZ-A09NA + MSZ-A15NA	7,700	7,700	7,700	12,900	36,000	3,820	16.0	8.5	18.55	16.78	N.A.	
	7,700	7,700	7,700	12,900	36,000	3,100			15.05	13.61		
MSZ-A09NA + MSZ-A09NA + MSZ-A12NA + MSZ-A12NA	7,700	7,700	10,300	10,300	36,000	3,820	16.0	8.5	18.55	16.78	1/2 X 3/8"	(1) MAC-A455JP-E
	7,700	7,700	10,300	10,300	36,000	3,100			15.05	13.61		

*Port Adapter size = 3/8" x 1/2", Qty = 1, Part No. = MAC-A454JP-E

Specifications are subject to change without notice.

P-SERIES

COMMERCIAL, INSTITUTIONAL AND LARGE RESIDENTIAL

The Mr. Slim P-Series delivers flexible and convenient cooling and heating solutions to almost any commercial, institutional or large residential application. Choose from small, quiet indoor and outdoor units that operate with the increased efficiency you need. Whether in a church, office building, school, nursing home, restaurant, retail store, or equipment room, the compact design of the P-Series indoor units makes cooling and heating difficult spaces a breeze. With wall-mounted, ceiling-recessed and ceiling-suspended options, the P-Series is the perfect solution for almost any building. The P-Series provides up to 42,000 Btu/h of cooling or heating performance.

INVERTER Technology

INVERTER-driven compressor technology gives Mr. Slim systems a higher degree of cooling and heating abilities that outperform and manage energy more efficiently than conventional systems. Desired room temperature is reached more quickly and maintained more consistently. This capability eliminates the peaks and valleys of temperature swings that we're used to with conventional units.

The PKA and PLA indoor units can be used with our Hyper-Heating INVERTER (H2i™) outdoor heat pump units. These innovative H2i outdoor units are designed to deliver consistent, efficient cooling and heating even in extreme low outdoor temperatures from a single INVERTER-driven compressor system.

Flexible Control

Convenient and efficient zone control means you can cool or heat only the spaces in use. You can even have single or dual controllers connected to one system. The controller



does not even have to be in the space shared with the indoor unit. Features of the controller include a weekly timer, temperature range limiting, auto-off, expanded fault codes, and service call number display.

Low Ambient Operation

The ability of these units to operate effectively in low temperatures along with the addition of a low-ambient wind baffle accessory allows for a space to be air-conditioned even when it is as low as 0° F outside. This cooling ability is important when dealing with electronic equipment rooms, telecom substations, surveillance mechanical rooms, restaurant kitchens, fitness centers and more.

Redi-charged Systems

P-Series outdoor units come with enough refrigerant to be installed 70 feet (PUY(Z)12-36) and up to 100 feet (PUY(Z)42) from the indoor units. Linesets can be run up to 100 feet from PUY(Z)12-18 outdoor units and 165 feet from PUY(Z)24-42 outdoor units when additional charge is added. Thanks to unique design profiles and R410A refrigerant, these systems are easier to fit into any space. R410A is environmentally friendly with zero Ozone Depletion Potential (ODP).

Hot-start System

Mr. Slim heat pumps use our hot-start technology to provide warmth from the beginning by ramping up fan speed as the coil warms. When you want warm air without annoying drafts, that's what you'll get.

Installation Service and Maintenance Ease

P-Series outdoor units are designed with easy service and maintenance in mind. Maintenance points are located behind easy-access panels to make installation and service effortless for a trained technician. Four-way piping access allows connection in four directions: front, rear, right and bottom (all PUY/PUZ models). Using only three polarity sensitive wires plus a ground conductor run from the outdoor to the indoor unit, providing both power and communication connections. Two non-polar wires connect the indoor unit and wall-mounted controller. This wiring design helps avoid installation errors. An optional wireless remote controller kit is available for the P-Series ceiling-mounted indoor units.



P-Series Wired Remote Controller



PKA Wall-mounted Air Conditioners and Heat Pumps
12,000 to 34,200 Btu/h
[pgs.24-26]



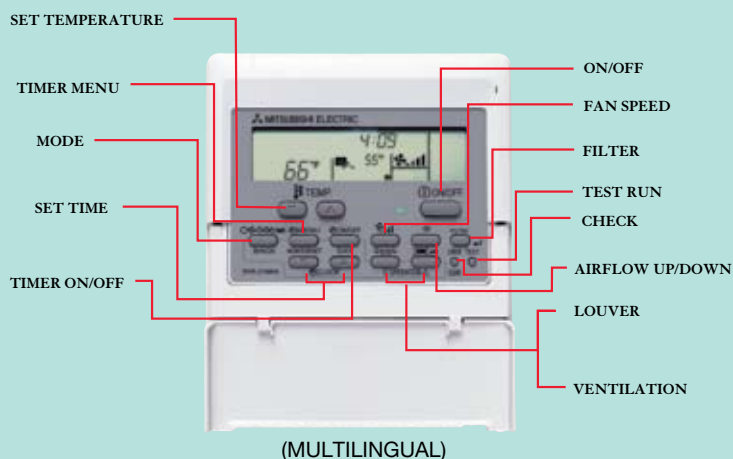
PLA Ceiling-recessed Air Conditioners and Heat Pumps
12,000 to 42,000 Btu/h
[pgs.27-29]



PCA Ceiling-suspended Air Conditioners and Heat Pumps
24,000 to 42,000 Btu/h
[pgs.30-32]



Features	Benefits
INVERTER TECHNOLOGY	You can enjoy high-speed cooling and heating and consistent delivery of comfort year-round.
QUIET OPERATION	You can hold a board meeting or teach a class in quiet comfort.
NO DUCTWORK	There's no need to shut down for major construction because installation is quick and easy.
ZONE CONTROL	You can cool and heat only those spaces desired for maximum control and energy efficiency.
ADVANCED MICROPROCESSOR CONTROLS	Built-in electronics ensure efficient operation and maximum performance for optimum comfort.
LOW AMBIENT COOLING DOWN TO 0° F OUTDOORS (REQUIRES WIND BAFFLE)	This feature is perfect for computer network centers and telecom equipment rooms that need help to stay cool down to 0° F outside.
ENVIRONMENTALLY FRIENDLY	Mr. Slim systems use R410A, an environmentally-friendly refrigerant.



More Compact INVERTER-driven Outdoor Units

These Mr. Slim units employ advanced Pulse Amplitude Modulation (PAM). PAM adjusts the form of the current wave to emulate the form of the supply voltage wave so that **98 percent** of input power is effectively utilized.

PUY/PUZ



12,000-18,000
Btu/h



24,000-36,000
Btu/h



42,000
Btu/h



30,000-36,000
Btu/h

PUZ-HA

H2i™

HYPER-HEATING INVERTER
P-SERIES HEAT PUMP SYSTEM
30,000 to 36,000 Btu/h Capacity

Unequaled Year-round Comfort

The cooling and heating success of Mitsubishi Electric's INVERTER heat pump systems is well-documented. Our Hyper-Heating INVERTER (H2i) technology advances the process a step further with the added benefit of year-round comfort with a single system even on the coldest days of the year in most places. The 3-ton wall-mounted or ceiling-recessed indoor units connected to the H2i outdoor units are flexible enough to satisfy almost any light commercial or institutional renovation or new construction project.



The Next Generation in Heat Pump Technology

These H2i outdoor units give a new level of performance to Mr. Slim P-Series models, providing the extra heat-generating power it takes to deliver comfort and consistency in extreme climates. H2i units use Mitsubishi Electric's INVERTER-driven scroll compressor technology to achieve the desired room temperature quickly and maintain it consistently while simultaneously conserving energy. Plus with the integration of our exclusive H2i flash technology, these units recover heat energy that is normally wasted in the flash process at the outdoor coil. This process helps the H2i system overcome issues commonly associated with conventional heat pumps such as decreases in low-side pressure, refrigerant mass flow rate and operational capacity. As a result H2i units exhibit **100 percent of rated heating capacity at 5° F and 80 percent at -13° F outdoor ambient temperatures (see Figure 1)**. Plus they use R410A environmentally-friendly refrigerant.

H2i heat pumps offer a variety of features designed to take the worry out of temperature control such as automatic restart in the case of power outages and automatic cool/heat changeover. And its long line-length capabilities of up to 245 ft. expand application possibilities.





Sometimes cooling spaces such as computer or mechanical rooms and kitchens is necessary even when the temperature is below freezing. Air conditioning down to 0° F outdoor ambient temperature is possible with the addition of a wind baffle. Whether cooling or heating the H2i P-Series gives you the flexibility to temper extreme outdoor temperatures.

Warm Air Quickly!

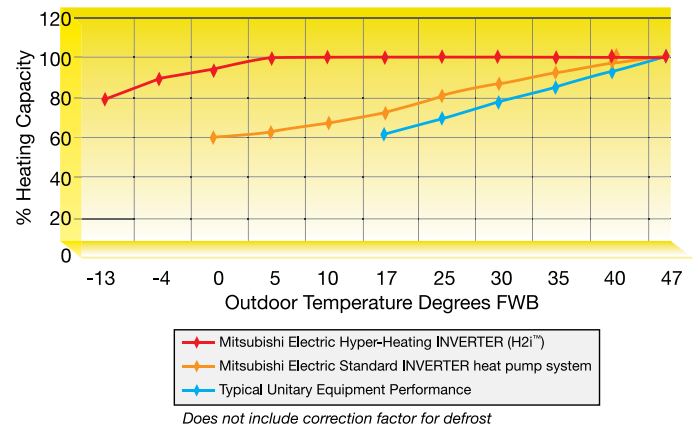
At startup a special circuit quickly delivers refrigerant to the air-conditioning cycle. This process rapidly increases the mass flow rate in the system. As a result air at comfortable temperatures begins flowing from indoor units right away. Even at an outdoor temperature of -13° F, the H2i system can discharge 100° F temperature air from the indoor units. At 5° F outdoor temperature and above, the discharge temperature reaches an impressive 110° F with a 40° F temperature rise (see Figure 2). This feature translates into a comfortable climate in all zones of a home or office, whether cooling or heating, no matter the temperature outside.



(Figure 1)

Hyper-Heating INVERTER vs. Other Units

% Heating Capacity vs. Outdoor Temperature



INDOOR UNITS:

PKA

The PKA indoor unit is a compact and quiet wall-mounted unit that delivers exceptional cooling and heating performance.

- Hard-wired, wall-mounted, remote controller (-FA model) or wireless (-FAL model)
- Adjustable vane control
- Easy-clean filters



PLA

PLA-A**-BA ceiling-recessed indoor unit offers increased application flexibility and ease of installation especially in tight spaces.

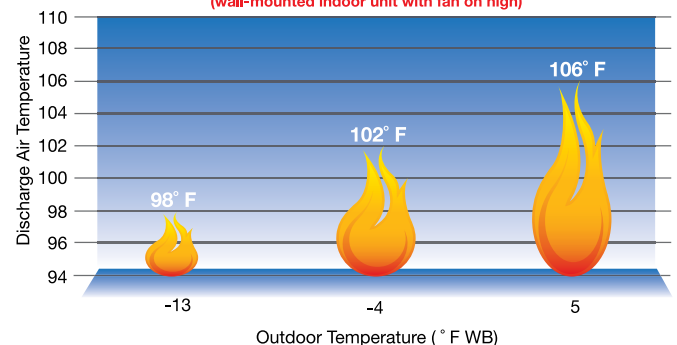
- Independent vane motor control: five fixed settings plus swing
- Auto wave airflow in heating mode: unit independently cycles through all vertical positions for a more even heat distribution
- Built-in drain lift mechanism for condensate removal; lifts up to 33-7/16 in.
- Ventilation air intake
- Easy-clean filters
- Optional i-see™ sensor accessory



(Figure 2)

Indoor Unit Discharge Temperature

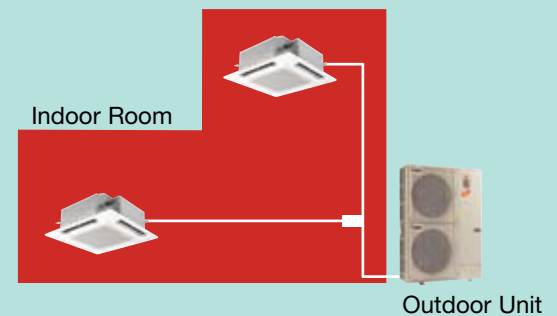
(wall-mounted indoor unit with fan on high)





Two in One

If you have a large space such as a long room or hallway which would be considered one zone, two indoor units can be connected to the outdoor unit to cool or heat the space and provide the maximum amount of comfort. The process in which two indoor units act as one to spread the outdoor unit's capacity over a large area is called *Twinning*.



Heating Performance at Low Temperatures

Our Hyper-Heating INVERTER system provides outstanding heating performance at extremely low temperatures while keeping effective energy usage at the forefront. Take a look at these impressive COP (Coefficient of Performance) values. The Mr. Slim H2i P-Series systems are able to maximize efficiency at low temperatures while providing tremendous heating output.

Heating Performance at Low Temperatures

PUZ-HA30NHA

COP	PK	PL
47° F	2.71	2.73
17° F	1.67	1.64
5° F	1.47	1.41

PUZ-HA36NHA

COP	PK	PL
47° F	3.59	3.45
17° F	2.10	2.10
5° F	1.90	1.90

H2i™ HEAT PUMP

P-SERIES Specifications



FA = Wired Controller; FAL = Wireless Controller

Model Name	Indoor Unit		PKA-A30FA(L)	PKA-A36FA(L)	PLA-A30BA	PLA-A36BA
	Outdoor Unit		PUZ-HA30NHA	PUZ-HA36NHA	PUZ-HA30NHA	PUZ-HA36NHA
Cooling *1	Rated Capacity	Btu/h	30,000	34,200	30,000	36,000
	Capacity Range	Btu/h	18,000-30,000	18,000-34,200	18,000-30,000	18,000-36,000
	Total Input	W	2,730	2,950	2,450	3,120
	Energy Efficiency	SEER	14.5	16.0	15.6	16.0
	Moisture Removal	Pints/h	7.9	7.1	7.2	6.8
	Sensible Heat Factor		0.70	0.77	0.73	0.79
Heating at 47° F *2	Rated Capacity	Btu/h	32,000	38,000	32,000	38,000
	Capacity Range	Btu/h	18,000-34,000	18,000-40,000	18,000-34,000	18,000-40,000
	Total Input	W	3,460	3,100	3,440	3,230
	HSPF (IV)	Btu/h/W	8.9	9.4	8.8	9.4
Heating at 17° F *3	Capacity	Btu/h	32,000	38,000	32,000	38,000
	Total Input	W	5,600	5,300	5,720	5,300
Heating at 5° F *4	Capacity	Btu/h	32,000	38,000	32,000	38,000
	Total Input	W	6,370	5,860	6,630	5,860
Power Supply	Phase, Cycle, Voltage		1-Phase, 60Hz, 208 / 230V		1-Phase, 60Hz, 208 / 230V	
	Breaker Size	A	30		30	
Voltage	Indoor - Outdoor S1 - S2		AC 208 / 230V		AC 208 / 230V	
	Indoor - Outdoor S2 - S3		DC24V		DC24V	
	Indoor - Remote Controller		DC12V: For Wired Controller (FA)		DC12V	
Indoor Unit	MCA	A	1.0		1.0	2.0
	Fan Motor	F.L.A.	0.43	0.52	0.51	1.00
	Fan Motor Output	W	45	70	50	120
	Airflow	DRY (CFM)	530-705 (Lo-Hi)	780-990 (Lo-Hi)	490-570-640-740 (Lo-M1-M2-Hi)	710-810-920-1,060 (Lo-M1-M2-Hi)
		WET (CFM)	480-635 (Lo-Hi)	700-890 (Lo-Hi)	460-530-600-710 (Lo-M1-M2-Hi)	670-770-880-1,030 (Lo-M1-M2-Hi)
	Sound Pressure Level	dB(A)	39-45 (Lo-Hi)	46-49 (Lo-Hi)	28-30-32-34 (Lo-M1-M2-Hi)	32-34-37-40 (Lo-M1-M2-Hi)
	External Finish Color	Munsell No.	3.4Y 7.7/0.8		Grille: 6.4Y 8.9/0.4	
	Dimension Unit	W: In.	55-1/8	66-1/8	33-1/16 (Grille: 37-3/8)	
		D: In.	9-1/4		33-1/16 (Grille: 37-3/8)	
		H: In.	13-3/8		10-3/16 (Grille: 1-3/8)	11-3/4 (Grille: 1-3/8)
	Weight Unit	Lbs.	53	62	55 (Grille: 13)	
	Drain Lift Mechanism (Included)	H: In.	N/A		33-7/16	
	Field Drainpipe Size	In.	I.D.: 13/16		O.D.: 1-1/4	
Outdoor Unit	MCA	A	28		28	
	MOC	A	40		40	
	Fan Motor	F.L.A.	0.4 + 0.4		0.4 + 0.4	
	Fan Motor Output	W	60 + 60		60 + 60	
	Compressor	Model	DC INVERTER-driven Scroll		DC INVERTER-driven Scroll	
		R.L.A.	18		18	
		L.R.A.	27.5		27.5	
	Airflow	CFM	3,530		3,530	
	Refrigerant Control		Electronic Expansion Valve		Electronic Expansion Valve	
	Defrost Method		Reverse Cycle		Reverse Cycle	
	Sound Pressure Level at Cooling *1	dB(A)	52		52	
	Sound Pressure Level at Heating *2	dB(A)	53		53	
	External Finish Color	Munsell No.	3Y 7.8/1.1		3Y 7.8/1.1	
	Dimensions	W: In.	37-3/8		37-3/8	
		D: In.	13 + 1-3/16		13 + 1-3/16	
		H: In.	53-1/8		53-1/8	
	Weight	Lbs.	267		267	
Remote Controller			Located with Indoor Unit		Located with Grille	
Refrigerant	Type		R410A		R410A	
	Charge	Lbs.	12		12	
	Oil	Type (fl. oz.)	FV50S (45)		FV50S (45)	
Refrigerant Pipe	Gas Side O.D.	In.	5/8		5/8	
	Liquid Side O.D.	In.	3/8		3/8	
Refrigerant Pipe	Height Difference (Max.)	Ft.	100		100	
Length	Length (Max.)	Ft.	245		245	
Connection Method			Flared		Flared	
Operating Temperature Range	Cooling		0° F D.B. to 115° F D.B. with Wind Baffle Accessory Installed			
	Heating		-13° F W.B. to +59° F W.B.			

Notes:

*1 Rating conditions (cooling)-
Indoor: D.B. 26.7° C (80° F),
W.B. 19.4° C (67° F);
Outdoor: D.B. 35° C (95° F),
W.B. 23.9° C (75° F).

*2 Rating conditions (heating)-
Indoor: D.B. 21.1° C (70° F),
W.B. 15.6° C (60° F);
Outdoor: D.B. 8.3° C (47° F),
W.B. 6.1° C (43° F).

*3 Rating conditions (heating)-
Indoor: D.B. 21.1° C (70° F),
W.B. 15.6° C (60° F);
Outdoor: D.B. -8.3° C (17° F),
W.B. -9.4° C (15° F).

*4 Rating conditions (heating)-
Indoor: D.B. 21.1° C (70° F),
W.B. 15.6° C (60° F);
Outdoor: D.B. -15° C (5° F),
W.B. -15° C (5° F).

LIMITED WARRANTY | Six-year
warranty on compressor.
One-year warranty on parts.

Specifications are subject to
change without notice.

PKA

(GA/GAL,FA/FAL)

WALL-MOUNTED SERIES

12,000 to 34,200 Btu/h
Capacity



PKA Indoor Unit
(The same indoor unit is used for both cooling and heat pump systems.)



PAR-21MAA Wired Controller

These Mr. Slim systems come with either a wired (GA/FA) or wireless (GAL/FAL) remote controller that puts you in command of your personal comfort.



**PKA-L Series
Wireless Controller**

The PKA-Series fills small, critical and larger spaces with substantial cooling and heating from a compact, wall-mounted package. Walk into any room where a PKA system is installed, and all you'll notice is the perfectly comfortable climate. What you may not notice is the unit itself, which mounts high on the wall and blends into most spaces. The PKA-Series features an Auto Changeover mode that automatically switches back and forth between cooling and heating operation to compensate for indoor and outdoor temperature fluctuations.

Auto Vane Control

With a simple press of the OFF button the vane closes to cover the air outlet for a clean presentation when not in use. During operation the vane can be adjusted with the remote controller to the perfect position to direct the airflow horizontally in cooling mode or towards the floor in heating mode, keeping room temperature even and comfortable.

Easy-clean Filters

Convenient tabs let you remove the washable filters quickly and easily for faster cleaning. You'll also save time and money because you won't need to replace the filters.

Lightweight, Easy-to-install Indoor Unit

The smallest PKA unit measures about 39" wide, 13" tall and 9" deep. It weighs just 35 lbs. and is easily installed above windows or doorways and can typically be installed by just two licensed installers in about a half day. And Mr. Slim PKA-Series models don't even require ductwork, only a small three-inch opening in the wall or ceiling, so they can be installed in some of the toughest spaces, even on brick and masonry walls.

Ultimate Comfort Meets Ultimate Convenience

Select from a wall-mounted, hard-wired controller (GA/FA) or a wireless remote controller (GAL/FAL) for ultimate comfort control. The hand-held Mr. Slim LCD wireless remote controller is easier to use than most TV remotes. The set-temperature display is large and easy to read. Using the 24-hour timer, you can get the unit operation to start and stop at specified times and to repeat daily. And the convenient remote provides easy control of the Fan Speed as well as the COOL, HEAT, AUTO and DRY modes from anywhere in the room.



(PKA-A30FA MODEL SHOWN)

INVERTER



PKA COOLING-ONLY

P-SERIES Specifications

GA/FA = Wired controller
GAL/FAL = Wireless controller
BS = Seacoast Protection

Model Name	Indoor Unit		PKA-A12GA PKA-A12GAL	PKA-A18GA PKA-A18GAL	PKA-A24FA PKA-A24FAL	PKA-A30FA PKA-A30FAL	PKA-A36FA PKA-A36FAL
	Outdoor Unit		PUY-A12NHA PUY-A12NHA-BS	PUY-A18NHA PUY-A18NHA-BS	PUY-A24NHA PUY-A24NHA-BS	PUY-A30NHA PUY-A30NHA-BS	PUY-A36NHA PUY-A36NHA-BS
Cooling *1	Rated Capacity	Btu/h	12,000	18,000	24,000	30,000	34,200
	Capacity Range	Btu/h	6,000-12,000	8,000-18,000	12,000-24,000	12,000-30,000	12,000-34,200
	Total Input	W	1,210	2,240	2,650	4,400	5,030
	Energy Efficiency	SEER	13.8	14.1	13.5	13.0	13.1
	Moisture Removal	Pints/h	1.5	4.8	4.7	8.1	7.1
	Sensible Heat Factor		0.86	0.70	0.78	0.70	0.77
Power Supply	Phase, Cycle, Voltage		1 Phase, 60Hz, 208/230V *2				
Voltage	Indoor - Outdoor S1-S2		AC 208-230V				
	Indoor - Outdoor S2-S3		DC24V				
	Indoor - Remote Controller		DC12V : Wired Type (GA/FA)				
	Indoor - Remote Controller		Wireless Type (GAL/FAL)				
Indoor Unit	MCA	A	1				
	Fan Motor	F.L.A.	0.33		0.43		0.52
	Fan Motor Output	W	30		45		70
	Airflow (Lo-M1-M2-Hi) or (Lo-Hi)	DRY (CFM)	320-350-390-425		530-705		780-990
		WET (CFM)	290-315-350-380		480-635		700-890
	Sound Pressure Level (Lo-M1-M2-Hi) or (Lo-Hi)	dB(A)	36-38-41-43		39-45		46-49
	External Finish Color		Munsell No. 0.70Y 8.59/0.97		Munsell No. 3.4Y 7.7/0.8		
	Dimension Unit	W: In.	39		55-1/8		66-1/8
		D: In.	9-1/4				
		H: In.	13-3/8				
	Weight Unit	Lbs.	35		53		62
	Field Drainpipe Size I.D.		In.	13/16			
Outdoor Unit	MCA	A	13		18	25	
	MOCP	A	15	20	30	40	
	Fan Motor	F.L.A.	0.35		0.75		
	Fan Motor Output	W	40		75		
	Compressor	Model (Type)	DC INVERTER-driven Twin Rotary				
		R.L.A.	12				
		L.R.A.	14		17.5		
	Airflow	CFM	1,200		1,940		
	Refrigerant Control		Linear Expansion Valve				
	Sound Pressure Level (Cooling) *1	dB(A)	46		48		
	External Finish Color		Munsell No. 3Y 7.8/1.1				
	Dimensions	W: In.	31-1/2		37-3/8		
		D: In.	13 + 7/8		13 + 1-3/16		
		H: In.	23-5/8		37-1/8		
	Weight	Lbs.	90	97	163		
	Remote Controller	Type		GA/FA = Wired; GAL/FAL = Wireless (Located with Indoor Unit)			
Refrigerant	Type		R410A				
	Charge	Lbs., Oz.	2, 14	3, 12	6		
	Oil	Type (Fl. Oz.)	MEL56 (20)		MEL56 (28)		
Refrigerant Pipe	Gas Side O.D.	In.	1/2		5/8		
	Liquid Side O.D.	In.	1/4		3/8		
	Height Difference (Max.)	Ft.	100				
	Length (Max.)		100		165		
Connection Method	Indoor/Outdoor		Flared/Flared				

NOTES: Test conditions are based on ARI 210/240.

*1 Rating conditions (cooling)-Indoor: D.B. 80° F (27° C), W.B. 67° F (19° C); Outdoor: D.B. 95° F (35° C), W.B. 75° F (24° C).

*2 Indoor units receive power from outdoor units through field-supplied interconnected wiring.

Specifications are subject to change without notice.

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.



(PKA-A30FA MODEL SHOWN)

INVERTER



PKA HEAT PUMP

P-SERIES Specifications

GA/FA = Wired controller
GAL/FAL = Wireless controller
BS = Seacoast Protection

Model Name	Indoor Unit		PKA-A18GA PKA-A18GAL	PKA-A24FA PKA-A24FAL	PKA-A30FA PKA-A30FAL	PKA-A36FA PKA-A36FAL
	Outdoor Unit		PUZ-A18NHA PUZ-A18NHA-BS	PUZ-A24NHA PUZ-A24NHA-BS	PUZ-A30NHA PUZ-A30NHA-BS	PUZ-A36NHA PUZ-A36NHA-BS
Cooling *1	Rated Capacity	Btu/h	18,000	24,000	30,000	34,200
	Capacity Range	Btu/h	8,000-18,000	12,000-24,000	12,000-30,000	12,000-34,200
	Total Input	W	2,240	2,650	4,400	5,030
	Energy Efficiency	SEER	14.1	13.5	13	13.1
	Moisture Removal	Pints/h	4.8	4.7	8.1	7.1
	Sensible Heat Factor		0.70	0.78	0.70	0.77
Heating at 47° F *2	Rated Capacity	Btu/h	19,000	26,000	32,000	37,000
	Capacity Range	Btu/h	8,000-20,000	12,000-28,000	12,000-34,000	12,000-38,000
	Total Input	W	2,130	2,570	3,660	3,610
	HSPF (Region IV)	Btu/h/W	8.3	8.5		8.3
Heating at 17° F *3	Capacity	Btu/h	13,000	16,000	23,000	25,000
	Total Input	W	1,670	2,200	3,050	3,070
Power Supply	Phase, Cycle, Voltage		1 Phase, 60Hz, 208-230V *4			
Voltage	Indoor - Outdoor S1-S2		AC 208/230V			
	Indoor - Outdoor S2-S3		DC24V			
	Indoor - Remote Controller		DC12V : Wired Type (GA/FA)			
	Indoor - Remote Controller		Wireless Type (GAL/FAL)			
Indoor Unit	MCA	A	1			
	Fan Motor	F.L.A.	0.33	0.43	0.52	
	Fan Motor Output	W	30	45	70	
	Airflow (Lo-M1-M2-Hi) or (Lo-Hi)	DRY (CFM)	320-350-390-425	530-705		780-990
		WET (CFM)	290-315-350-380	480-635		700-890
	Sound Pressure Level (Lo-M1-M2-Hi) or (Lo-Hi)	dB(A)	36-38-41-43	39-45		46-49
	External Finish Color		Munsell No. 0.70Y 8.59/0.97	Munsell No. 3.4Y 7.7/0.8		
	Dimension Unit	W: In.	39	55-1/8		66-1/8
		D: In.	9-1/4			
		H: In.	13-3/8			
	Weight Unit	Lbs.	35	53		62
	Field Drainpipe Size I.D.	In.	13/16			
Outdoor Unit	MCA	A	13	18	25	
	MOCP	A	20	30	40	
	Fan Motor	F.L.A.	0.35	0.75		
	Fan Motor Output	W	40	75		
	Compressor	Model (Type)	DC INVERTER-driven Twin Rotary			
		R.L.A.	12			
		L.R.A.	14	17.5		
	Airflow	CFM	1,200	1,940		
	Refrigerant Control		Linear Expansion Valve			
	Defrost Method		Reverse Cycle			
	Sound Pressure Level (Cooling) *1	dB(A)	46	48		
	Sound Pressure Level (Heating) *2		47	50		
	External Finish Color		Munsell No. 3Y 7.8/1.1			
	Dimensions	W: In.	31-1/2	37-3/8		
		D: In.	13 + 7/8	13 + 1-3/16		
		H: In.	23-5/8	37-1/8		
	Weight	Lbs.	99	165		
Remote Controller	Type		GA/FA: Wired Controller; GAL/FAL: Wireless Controller (Located with Indoor Unit)			
Refrigerant	Type		R410A			
	Charge	Lbs., Oz.	3, 12	6		
	Oil	Type (Fl. Oz.)	MEL56 (20)	MEL56 (28)		
Refrigerant Pipe	Gas Side O.D.	In.	1/2	5/8		
	Liquid Side O.D.		1/4	3/8		
Refrigerant Pipe Length	Height Difference (Max.)	Ft.	100			
	Length (Max.)		100	165		
Connection Method	Indoor/Outdoor		Flared/Flared			

NOTES: Test conditions are based on ARI 210/240.

*1 Rating conditions (cooling)-Indoor: D.B. 80° F (27° C), W.B. 67° F (19° C); Outdoor: D.B. 95° F (35° C), W.B. 75° F (24° C).

*2 Rating conditions (heating)-Indoor: D.B. 70° F (21° C), W.B. 60° F (16° C); Outdoor: D.B. 47° F (8° C), W.B. 43° F (6° C).

*3 Rating conditions (heating)-Indoor: D.B. 70° F (21° C), W.B. 60° F (16° C); Outdoor: D.B. 17° F (-8.3° C), W.B. 15° F (-9° C).

*4 Indoor units receive power from outdoor units through field-supplied interconnected wiring.

Specifications are subject to change without notice.

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.

PLA

CEILING-RECESSED SERIES

12,000 to 42,000
Btu/h Capacity



PLA Indoor Unit
(Same indoor unit is used for both
cooling and heat pump systems)

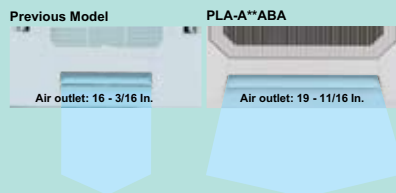
If there's at least a foot of space above your ceiling, the PLA-Series is for you. These models combine powerful cooling and heating in an elegant cassette design that recesses into the ceiling. When installed, the attractive, low-profile grille is all you see. With its ventilation air intake capability and four-way discharge airflow, the PLA-Series gives you plenty of comfortable airflow options. These units even contain branch duct knockouts for either a round or a rectangular duct, allowing for the air conditioning of a smaller adjacent space.

Auto Cooling/Heating Changeover

Heat pump systems will automatically switch back and forth between cooling and heating to compensate for temperature fluctuations in a room.

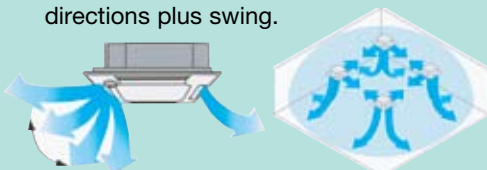
Wider Air Stream

Longer air outlets deliver wider air streams for improved air distribution and energy savings. This feature means quieter air delivery with fewer drafts and great overall cooling and heating coverage.



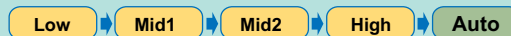
Independent Vane Motor Control

Each of the four vanes can be set by the wired remote controller to operate independently to match the room layout. Specific vane settings include five fixed directions plus swing.



Auto Fan Speed Feature

Choose from four set fan speeds or auto fan speed to ensure faster achievement of room temperature. Auto fan speed mode allows the fan to adjust its speed based on the degree of differential between set-point and room temperature.



Auto Wave Feature (HEATING mode)

In the HEATING mode each air outlet vane operates independently, distributing warm air in multiple directions for the best in room heating.



i-see™ Sensor Accessory

In addition to the return air temperature, the PLA-A**BA four-way ceiling cassette with the field-installed i-see sensor measures the floor temperature in real time, observing the room vertically for better management of sensible temperature (temperature felt by the occupant). The i-see sensor measures the infrared rays generated from the surrounding wall and floor surface at an angle of 360°. The infrared ray energy is converted into a temperature value. The i-see sensor rotates 90° slowly in five-second intervals for correct measurement of temperature to cover the full floor space. When combined with the auto fan speed mode, air can be directed to the farthest corners of the room for enhanced temperature coverage.

i-see Sensor



UNIT FEATURES:

- Built-in drain lift mechanism for condensate removal; lifts up to 33-7/16 inches with built-in fail-safe sensor
- Easy to install with access to suspension rods through corner pockets
- Ventilation air intake
- Easy to maintain, long-life filter, which is washable and provides about 2,500 hours of use before cleaning is needed, depending on use

i-see sensor detail





(PLA-A36BA MODEL SHOWN
WITH OPTIONAL I-SEE™ SENSOR)

INVERTER



PLA COOLING-ONLY

P-SERIES Specifications

BS = Seacoast Protection

Model Name	Indoor Unit		PLA-A12BA	PLA-A18BA	PLA-A24BA	PLA-A30BA	PLA-A36BA	PLA-A42BA	
	Outdoor Unit		PUY-A12NHA PUY-A12NHA-BS	PUY-A18NHA PUY-A18NHA-BS	PUY-A24NHA PUY-A24NHA-BS	PUY-A30NHA PUY-A30NHA-BS	PUY-A36NHA PUY-A36NHA-BS	PUY-A42NHA PUY-A42NHA-BS	
Cooling *1	Rated Capacity	Btu/h	12,000	18,000	24,000	30,000	35,000	42,000	
	Capacity Range	Btu/h	6,000-12,000	8,000-18,000	12,000-24,000	12,000-30,000	12,000-35,000	18,000-42,000	
	Total Input	W	1,260	1,940	2,500	4,100	4,500	4,600	
	Energy Efficiency	SEER	13.5	14.2	13.6		14.2	14.4	
	Moisture Removal	Pints/h	1.7	3.0	5.1	7.2	8.1	10.9	
	Sensible Heat Factor		0.84	0.81	0.76	0.73	0.74	0.71	
Power Supply	Phase, Cycle, Voltage		1 Phase, 60Hz, 208-230V *2						
Voltage	Indoor - Outdoor S1-S2		AC 208/230V						
	Indoor - Outdoor S2-S3		DC24V						
	Indoor - Remote Controller		DC12V : Wired Type						
Indoor Unit	MCA	A	1				2		
	Fan Motor	F.L.A.	0.51				1.00		
	Fan Motor Output	W	50				120		
	Airflow (Lo-M1-M2-Hi)	DRY (CFM)	390-420-460-530	420-490-570-640		490-570-640-740	710-810-920-1,060	780-880-990-1,090	
		WET (CFM)	350-390-420-490	390-460-530-600		460-530-600-710	670-770-880-1,030	740-850-950-1,060	
	External Pressure	Pa	0						
	Sound Pressure Level (Lo-M1-M2-Hi)	dB(A)	27-28-29-31	28-29-31-32		28-30-32-34	32-34-37-40	34-36-39-41	
	External Finish Color (Panel)		Munsell No. 6.4Y 8.9/0.4						
	Dimension Unit (Panel)	W: In.	33-1/16 (37-3/8)						
		D: In.	33-1/16 (37-3/8)						
		H: In.	10-3/16 (1-3/8)				11-3/4 (1-3/8)		
	Weight Unit (Panel)	Lbs.	49 (13)		51 (13)		55 (13)		
	Drain Lift Mechanism (included)	H: In.	33-7/16						
	Field Drainpipe Size O.D.	In.	1-1/4						
Outdoor Unit	MCA	A	13		18	25		26	
	MOCP	A	15	20	30	40			
	Fan Motor	F.L.A.	0.35		0.75			0.4 + 0.4	
	Fan Motor Output	W	40		75			86 + 86	
	Compressor	Model (Type)	DC INVERTER-driven Twin Rotary						INVERTER-driven Scroll
		R.L.A.	12						20
		L.R.A.	14			17.5		27.5	
	Airflow	CFM	1,200		1,940			3,530	
	Refrigerant Control		Linear Expansion Valve						
	Sound Pressure Level (Cooling) *1	dB(A)	46		48			51	
	External Finish Color		Munsell No. 3Y 7.8/1.1						
	Dimensions	W: In.	31-1/2		37-3/8				
		D: In.	13 + 7/8		13 + 1-3/16				
		H: In.	23-5/8		37-1/8			53-1/8	
	Weight	Lbs.	90	97	163			258	
Remote Controller	Type		Wired Remote Controller Packaged with Grille						
Refrigerant	Type		R410A						
	Charge	Lbs., Oz.	2, 14	3, 12	6			10	
	Oil	Type (Fl. Oz.)	MEL56 (20)		MEL56 (28)			FV50S (45)	
Refrigerant Pipe	Gas Side O.D.	In.	1/2		5/8				
	Liquid Side O.D.		1/4		3/8				
	Height Difference (Max.)	Ft.	100						
	Length (Max.)		100		165				
Connection Method	Indoor/Outdoor		Flared/Flared						

NOTES: Test conditions are based on ARI 210/240.

*1 Rating conditions (cooling)-Indoor: D.B. 80° F (27° C), W.B. 67° F (19° C); Outdoor: D.B. 95° F (35° C), W.B. 75° F (24° C).

*2 Indoor units receive power from outdoor units through field-supplied interconnected wiring.

Specifications are subject to change without notice.

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.



(PLA-A36BA MODEL SHOWN
WITH OPTIONAL I-SEE™ SENSOR)



PLA HEAT PUMP

P-SERIES Specifications

BS = Seacoast Protection

Model Name	Indoor Unit		PLA-A18BA	PLA-A24BA	PLA-A30BA	PLA-A36BA	PLA-A42BA	
	Outdoor Unit		PUZ-A18NHA PUZ-A18NHA-BS	PUZ-A24NHA PUZ-A24NHA-BS	PUZ-A30NHA PUZ-A30NHA-BS	PUZ-A36NHA PUZ-A36NHA-BS	PUZ-A42NHA PUZ-A42NHA-BS	
Cooling *1	Rated Capacity	Btu/h	18,000	24,000	30,000	35,000	42,000	
	Capacity Range	Btu/h	8,000-18,000	12,000-24,000	12,000-30,000	12,000-35,000	18,000-42,000	
	Total Input	W	1,940	2,500	4,100	4,500	4,600	
	Energy Efficiency	SEER	14.2	13.6		14.2	14.4	
	Moisture Removal	Pints/h	3.0	5.1	7.2	8.1	10.9	
	Sensible Heat Factor		0.81	0.76	0.73	0.74	0.71	
Heating at 47° F *2	Rated Capacity	Btu/h	19,000	26,000	32,000	37,000	45,000	
	Capacity Range	Btu/h	8,000-20,000	12,000-28,000	12,000-34,000	12,000-38,000	18,000-48,000	
	Total Input	W	1,900	2,570	3,370	3,300	4,450	
	HSPF (Region IV)	Btu/h/W	9.8	8.5	8.7	9.3		
Heating at 17° F *3	Capacity	Btu/h	13,000	16,000	23,000	25,000	30,000	
	Total Input	W	1,590	2,200	3,050	3,070	4,300	
Power Supply	Phase, Cycle, Voltage		1 Phase, 60Hz, 208/230V *4					
Voltage	Indoor - Outdoor S1-S2		AC 208-230V					
	Indoor - Outdoor S2-S3		DC24V					
	Indoor - Remote Controller		DC12V : Wired Type					
Indoor Unit	MCA	A	1			2		
	Fan Motor	F.L.A.	0.51			1.00		
	Fan Motor Output	W	50			120		
	Airflow (Lo-M1-M2-Hi)	DRY (CFM)	420-490-570-640		490-570-640-740	710-810-920-1,060	780-880-990-1,090	
		WET (CFM)	390-460-530-600		460-530-600-710	670-770-880-1,030	740-850-950-1,060	
	External Pressure	Pa	0					
	Sound Pressure Level (Lo-M1-M2-Hi)	dB(A)	28-29-31-32		28-30-32-34	32-34-37-40	34-36-39-41	
	External Finish Color (Panel)		Munsell No. 6.4Y 8.9/0.4					
	Dimension Unit (Panel)	W: In.	33-1/16 (37-3/8)					
		D: In.	33-1/16 (37-3/8)					
		H: In.	10-3/16 (1-3/8)			11-3/4 (1-3/8)		
	Weight Unit (Panel)	Lbs.	49 (13)	51 (13)		55 (13)		
	Drain Lift Mechanism (included)	H: In.	33-7/16					
	Field Drainpipe Size O.D.	In.	1-1/4					
Outdoor Unit	MCA	A	13	18	25		26	
	MOCP	A	15	30	40			
	Fan Motor	F.L.A.	0.35	0.75			0.4 + 0.4	
	Fan Motor Output	W	40	75			86 + 86	
	Compressor	Model (Type)	DC INVERTER-driven Twin Rotary					INVERTER-driven Scroll
		R.L.A	12					20
		L.R.A.	14		17.5		27.5	
	Airflow	CFM	1,200	1,940			3,530	
	Refrigerant Control		Linear Expansion Valve					
	Defrost Method		Reverse Cycle					
	Sound Pressure Level (Cooling) *1	dB(A)	46	48			51	
	Sound Pressure Level (Heating) *2	dB(A)	47	50			55	
	External Finish Color		Munsell No. 3Y 7.8/1.1					
	Dimensions	W: In.	31-1/2	37-3/8				
		D: In.	13 + 7/8	13 + 1-3/16				
		H: In.	23-5/8	37-1/8			53-1/8	
	Weight	Lbs.	99	165			260	
Remote Controller	Type		Wired Remote Controller Packaged with Grille					
Refrigerant	Type	R410A						
	Charge	Lbs., Oz.	3, 12	6			10	
Refrigerant Pipe	Oil	Type (Fl. Oz.)	MEL56 (20)	MEL56 (28)			FV50S (45)	
	Gas Side O.D.	In.	1/2	5/8				
	Liquid Side O.D.		1/4	3/8				
	Height Difference (Max.)	Ft.	100					
Length (Max.)	100		165					
Connection Method	Indoor/Outdoor		Flared/Flared					

NOTES: Test conditions are based on ARI 210/240.

*1 Rating conditions (cooling)-Indoor: D.B. 80° F (27° C), W.B. 67° F (19° C);
Outdoor: D.B. 95° F (35° C), W.B. 75° F (24° C).

*2 Rating conditions (heating)-Indoor: D.B. 70° F (21° C), W.B. 60° F (16° C);
Outdoor: D.B. 47° F (8° C), W.B. 43° F (6.1° C).

*3 Rating conditions (heating)-Indoor: D.B. 70° F (21° C), W.B. 60° F (16° C);
Outdoor: D.B. 17° F (-8° C), W.B. 15° F (-9° C).

*4 Indoor units receive power from outdoor units through field-supplied interconnected wiring.
Specifications are subject to change without notice.

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.

PCA

CEILING-SUSPENDED SERIES

24,000 to 42,000 Btu/h Capacity



PCA Indoor Unit
(The same indoor unit is used for both cooling and heat pump systems.)

The PCA-Series is all about providing powerful cooling and heating performance. This ceiling-suspended unit delivers enough cold or hot air to make any space more comfortable. Manually-adjusted, over-sized swing louvers direct the airflow left or right, quietly covering the entire space. Accessory filters are available to increase efficiency and increase the time span between service calls. The PCA-Series is perfect for restaurants, kitchens and other larger commercial spaces where ovens and other equipment add to an already taxed cooling or heating load.

Control Airflow Angle for Better Coverage

With the wired remote controller four different airflow positions can be set. When in use the Autovane during cooling, the angle self-adjusts into a horizontal position to circulate cold air more effectively. During heating, the vane directs the hot air downward toward the floor, where it will rise and circulate, keeping your room comfortable from top to bottom.

Warm Air with No Drafts

Mr. Slim P-Series heat pumps provide warmth without drafts from the beginning with our hot-start technology.



All Mr. Slim PCA-Series models come with a wired remote controller that puts you in command of your personal comfort. The wireless controller is available in an accessory kit.

Bring In Outside Air

Ducting can be installed with minimal on-site work to bring in outside air, creating a healthier indoor environment.

Automatic Cooling/heating Changeover (Heat Pumps)

When set to AUTO mode, heat pump systems will automatically switch back and forth between cooling and heating operation to compensate for indoor and outdoor temperature fluctuations. This feature means total hands-free comfort and efficient air conditioning of your space.





(PCA-A36GA MODEL SHOWN)

INVERTER



PCA COOLING-ONLY

P-SERIES Specifications

BS = Seacoast Protection

Model Name	Indoor Unit		PCA-A24GA	PCA-A30GA	PCA-A36GA	PCA-A42GA
	Outdoor Unit		PUY-A24NHA PUY-A24NHA-BS	PUY-A30NHA PUY-A30NHA-BS	PUY-A36NHA PUY-A36NHA-BS	PUY-A42NHA PUY-A42NHA-BS
Cooling *1	Rated Capacity	Btu/h	24,000	30,000	35,000	42,000
	Capacity Range	Btu/h	12,000-24,000	12,000-30,000	12,000-35,000	18,000-42,000
	Total Input	W	2,500	4,100	4,630	5,070
	Energy Efficiency	SEER	13.4	13.0	13.1	13.8
	Moisture Removal	Pints/h	5.4	8.3	8.2	11.7
	Sensible Heat Factor		0.75	0.69	0.74	0.69
Power Supply	Phase, Cycle, Voltage		1 Phase, 60Hz, 208-230V *2			
Voltage	Indoor - Outdoor S1-S2		AC 208/230V			
	Indoor - Outdoor S2-S3		DC24V			
	Indoor - Remote Controller		DC12V : Wired Type			
Indoor Unit	MCA	A	1			
	Fan Motor	F.L.A.	0.53		0.69	
	Fan Motor Output	W	70		90	
	Airflow (Lo-M1-M2-Hi)	DRY (CFM)	495-530-565-635		705-740-810-880	
		WET (CFM)	445-480-510-570		635-670-730-790	
	Sound Pressure Level (Lo-M1-M2-Hi)	dB(A)	37-39-41-43		40-41-43-45	
	External Finish Color		Munsell No. 0.70Y 8.59/0.97			
	Dimension Unit	W: In.	51-9/16			
		D: In.	26-3/4			
		H: In.	8-5/16		10-5/8	
	Weight Unit	Lbs.	75		82	
	Field Drainpipe Size O.D.	In.	1			
Outdoor Unit	MCA	A	18	25		26
	MOCP	A	30	40		
	Fan Motor	F.L.A.	0.75			0.4 + 0.4
	Fan Motor Output	W	75			86 + 86
	Compressor	Model (Type)	DC INVERTER-driven Twin Rotary			INVERTER-driven Scroll
		R.L.A.	12			20
		L.R.A.	14	17.5		27.5
	Airflow	CFM	1,940			3,530
	Refrigerant Control		Linear Expansion Valve			
	Sound Pressure Level (Cooling) *1	dB(A)	48			51
	External Finish Color		Munsell No. 3Y 7.8/1.1			
	Dimensions	W: In.	37-3/8			
		D: In.	13 + 1-3/16			
		H: In.	37-1/8			53-1/8
	Weight	Lbs.	163			258
Remote Controller	Type		Wired Remote Controller (Located with Indoor Unit)			
Refrigerant	Type		R410A			
	Charge	Lbs.	6			10
	Oil	Type (Fl. Oz.)	MEL56 (28)			FV50S (45)
Refrigerant Pipe	Gas Side O.D.	In.	5/8			
	Liquid Side O.D.		3/8			
	Height Difference (Max.)	Ft.	100			
	Length (Max.)		165			
Connection Method	Indoor/Outdoor		Flared/Flared			

NOTES: Test conditions are based on ARI 210/240.

*1 Rating conditions (cooling)-Indoor: D.B. 80° F (27° C), W.B. 67° F (19° C); Outdoor: D.B. 95° F (35° C), W.B. 75° F (24° C).

*2 Indoor units receive power from outdoor units through field-supplied interconnected wiring.

Specifications are subject to change without notice.

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.



(PCA-A36GA MODEL SHOWN)

INVERTER



PCA HEAT PUMP

P-SERIES Specifications

BS = Seacoast Protection

Model Name	Indoor Unit		PCA-A24GA	PCA-A30GA	PCA-A36GA	PCA-A42GA
	Outdoor Unit		PUZ-A24NHA PUZ-A24NHA-BS	PUZ-A30NHA PUZ-A30NHA-BS	PUZ-A36NHA PUZ-A36NHA-BS	PUZ-A42NHA PUZ-A42NHA-BS
Cooling *1	Rated Capacity	Btu/h	24,000	30,000	35,000	42,000
	Capacity Range	Btu/h	12,000-24,000	12,000-30,000	12,000-35,000	18,000-42,000
	Total Input	W	2,500	4,100	4,630	5,070
	Energy Efficiency	SEER	13.4	13	13.1	13.8
	Moisture Removal	Pints/h	5.4	8.3	8.2	11.7
	Sensible Heat Factor		0.75	0.69	0.74	0.69
Heating at 47° F *2	Rated Capacity	Btu/h	26,000	32,000	37,000	45,000
	Capacity Range	Btu/h	12,000-28,000	12,000-34,000	12,000-38,000	18,000-48,000
	Total Input	W	2,570	3,390	3,490	4,850
	HSPF (Region IV)	Btu/h/W	8.5		8.3	8.5
Heating at 17° F *3	Capacity	Btu/h	16,000	23,000	25,000	30,000
	Total Input	W	2,200	3,050	3,070	4,300
Power Supply	Phase, Cycle, Voltage		1 Phase, 60Hz, 208/230V *4			
Voltage	Indoor - Outdoor S1-S2		AC 208-230V			
	Indoor - Outdoor S2-S3		DC24V			
	Indoor - Remote Controller		DC12V : Wired Type			
Indoor Unit	MCA	A	1			
	Fan Motor	F.L.A.	0.53		0.69	
	Fan Motor Output	W	70		90	
	Airflow (Lo-M1-M2-Hi)	DRY (CFM)	495-530-565-635		705-740-810-880	
		WET (CFM)	445-480-510-570		635-670-730-790	
	Sound Level (Lo-M1-M2-Hi)	dB(A)	37-39-41-43		40-41-43-45	
	External Finish Color		Munsell No. 0.70Y 8.59/0.97			
	Dimension Unit	W: In.	51-9/16			
		D: In.	26-3/4			
		H: In.	8-5/16		10-5/8	
	Weight Unit	Lbs.	75		82	
Field Drainpipe Size O.D.	In.	1				
Outdoor Unit	MCA	A	18	25		26
	MOCP	A	30	40		
	Fan Motor	F.L.A.	0.75			0.4 + 0.4
	Fan Motor Output	W	75			86 + 86
	Compressor	Model (Type)	DC INVERTER-driven Twin Rotary			INVERTER-driven Scroll
		R.L.A.	12			20
		L.R.A.	14	17.5		27.5
	Airflow	CFM	1,940			3,530
	Refrigerant Control		Linear Expansion Valve			
	Defrost Method		Reverse Cycle			
	Sound Level at Cooling *1	dB(A)	48			51
	Sound Level at Heating *2	dB(A)	50			55
	External Finish Color		Munsell No. 3Y 7.8/1.1			
	Dimensions	W: In.	37-3/8			
		D: In.	13 + 1-3/16			
		H: In.	37-1/8			53-1/8
	Weight	Lbs.	165			260
Remote Controller	Type		Wired Remote Controller (Located with Indoor Unit)			
Refrigerant	Type		R410A			
	Charge	Lbs.	6			10
Refrigerant Pipe	Oil	Type (Fl. Oz.)	MEL56 (28)			FV50S (45)
	Gas Side O.D.	In.	5/8			
	Liquid Side O.D.		3/8			
	Height Difference (Max.)	Ft.	100			
Length (Max.)	165					
Connection Method	Indoor/Outdoor		Flared/Flared			

NOTES: Test conditions are based on ARI 210/240.

*1 Rating conditions (cooling)-Indoor: D.B. 80° F (27° C), W.B. 67° F (19° C); Outdoor: D.B. 95° F (35° C), W.B. 75° F (24° C).

*2 Rating conditions (heating)-Indoor: D.B. 70° F (21° C), W.B. 60° F (16° C); Outdoor: D.B. 47° F (8° C), W.B. 43° F (6° C).

*3 Rating conditions (heating)-Indoor: D.B. 70° F (21° C), W.B. 60° F (16° C); Outdoor: D.B. 17° F (-8° C), W.B. 15° F (-9° C).

*4 Indoor units receive power from outdoor units through field-supplied interconnected wiring.

Specifications are subject to change without notice.

LIMITED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.

		INDOOR INTAKE AIR TEMPERATURE	OUTDOOR INTAKE AIR TEMPERATURE
COOLING	MAXIMUM	95° F D.B. (MS/MSY/MSZ), 90° F D.B. (MSY/MSZ-D/FD), 71° F W.B. (MS/MSY/MSZ), 73° F W.B. (MSY/MSZ-D/FD)	115° F D.B.
	MINIMUM	67° F D.B., 57° F W.B.	67° F D.B. (MU), 14° F D.B. (MUY(Z), MXZ)
HEATING	MAXIMUM	80° F D.B., 67° F W.B.	75° F D.B., 65° F W.B.
	MINIMUM	70° F D.B., 60° F W.B.	14° F D.B., 13° F W.B. (MUZ), 12° F W.B. (MXZ)

* MU units operate at intake air temperature down to 10° F with the addition of an ICM-326HM-1 low temperature control.

PKA/PLA/PUZ-HA RATING CONDITIONS

		INDOOR INTAKE AIR TEMPERATURE	OUTDOOR INTAKE AIR TEMPERATURE
COOLING	MAXIMUM	90° F D.B., 73° F W.B.	115° F D.B.
	MINIMUM	66° F D.B., 59° F W.B.	0° F D.B.*
HEATING	MAXIMUM	83° F D.B.	70° F D.B., 59° F W.B.
	MINIMUM	63° F D.B.	-13° F D.B., -13° F W.B.

(* With wind baffle accessory installed) Without wind baffle installed, the minimum temperature will be 23° F D.B.

PKA/PLA/PCA/PUY/PUZ-A RATING CONDITIONS

		INDOOR INTAKE AIR TEMPERATURE	OUTDOOR INTAKE AIR TEMPERATURE
COOLING	MAXIMUM	95° F D.B., 71° F W.B.	115° F D.B.
	MINIMUM	67° F D.B., 57° F W.B.	0° F D.B.*
HEATING	MAXIMUM	80° F D.B., 67° F W.B.	70° F D.B., 59° F W.B.
	MINIMUM	70° F D.B., 60° F W.B.	12° F D.B., 10° F W.B.

(* With wind baffle accessory installed) Without wind baffle installed, the minimum temperature will be 23° F D.B.

REFRIGERANT TUBING SETS

Lineset Model Number	Tube Size (In.)	Length Ft.	Insul.	Use With Mitsubishi Electric Mr. Slim Models
MLS143812T-15	1/4 x 3/8	15	1/2"	MS-A09WA; MSZ-A09NA, MSZ-A12NA; MSZ-FD09NA, MSZ-FD12NA
MLS143812T-30	1/4 x 3/8	30	1/2"	
MLS143812T-50	1/4 x 3/8	50	1/2"	
MLS143812T-65	1/4 x 3/8	65	1/2"	
MLS141212T-15	1/4 x 1/2	15	1/2"	MS-A12WA; MSY-A15NA, MSY-A17NA, MSZ-A15NA, MSZ-A17NA; PKA-A12GA(L), PKA-A18GA(L); PLA-A12BA, PLA-A18BA
MLS141212T-30	1/4 x 1/2	30	1/2"	
MLS141212T-50	1/4 x 1/2	50	1/2"	
MLS141212T-65	1/4 x 1/2	65	1/2"	
MLS141212T-100	1/4 x 1/2	100	1/2"	MSY-A24NA, MSZ-A24NA
MLS145812T-15	1/4 x 5/8	15	1/2"	
MLS145812T-30	1/4 x 5/8	30	1/2"	
MLS145812T-50	1/4 x 5/8	50	1/2"	
MLS145812T-65	1/4 x 5/8	65	1/2"	MSY-D30NA, MSZ-D30NA, MSY-D36NA, MSZ-D36NA; PKA-A24FA(L), PKA-A30FA(L), PKA-A36FA(L); PLA-A24BA, PLA-A30BA, PLA-A36BA, PLA-A42BA; PCA-A24GA, PCA-A30GA, PCA-A36GA, PCA-A42GA
MPLS385812T-10	3/8 x 5/8	10	1/2"	
MPLS385812T-15	3/8 x 5/8	15	1/2"	
MPLS385812T-30	3/8 x 5/8	30	1/2"	
MPLS385812T-50	3/8 x 5/8	50	1/2"	
MPLS385812T-65	3/8 x 5/8	65	1/2"	
MPLS385812T-100	3/8 x 5/8	100	1/2"	

REFRIGERANT LINE LENGTH FLARE/FLARE

Indoor Unit	Outdoor Unit	Max. Length in feet	Max. Height in feet
MS-A09WA	MU-A09WA	65	35
MS-A12WA	MU-A12WA	65	35
MSY-A15NA	MUY-A15NA	65	40
MSY-A17NA	MUY-A17NA	65	40
MSY-A24NA	MUY-A24NA	100	50
MSZ-A09NA	MUZ-A09NA	65	40
MSZ-A12NA	MUZ-A12NA	65	40
MSZ-A15NA	MUZ-A15NA	65	40
MSZ-A17NA	MUZ-A17NA	65	40
MSZ-A24NA	MUZ-A24NA	100	50
MSZ-FD09NA	MUZ-FD09NA	65	40
MSZ-FD12NA	MUZ-FD12NA	65	40
MSY-D30NA	MUY-D30NA	100	50
MSY-D36NA	MUY-D36NA	100	50
MSZ-D30NA	MUZ-D30NA	100	50
MSZ-D36NA	MUZ-D36NA	100	50
MSZ-A09NA, MSZ-A12NA, MSZ-A15NA	MXZ-2A20NA	164	49*/33
MSZ-A09NA, MSZ-A12NA, MSZ-A15NA, MSZ-A17NA, MSZ-A24NA	MXZ-3A30NA	230	49*/33
MSZ-A09NA, MSZ-A12NA, MSZ-A15NA, MSZ-A17NA, MSZ-A24NA	MXZ-4A36NA	230	49*/33
PKA-A12GA (L)	PUY-A12NHA	100	100
PKA-A18GA (L)	PUY-A18NHA, PUZ-A18NHA	100	100
PKA-A24FA (L)	PUY-A24NHA, PUZ-A24NHA	165	100
PKA-A30FA (L)	PUY-A30NHA, PUZ-A30NHA	165	100
PKA-A36FA (L)	PUY-A36NHA, PUZ-A36NHA	165	100
PKA-A36FA (L) (H2i)	PUZ-HA36NHA	265	100
PLA-A12BA	PUY-A12NHA	100	100
PLA-A18BA	PUY-A18NHA, PUZ-A18NHA	100	100
PLA-A24BA	PUY-A24NHA, PUZ-A24NHA	165	100
PLA-A30BA	PUY-A30NHA, PUZ-A30NHA	165	100
PLA-A36BA	PUY-A36NHA, PUZ-A36NHA	165	100
PLA-A36BA (H2i)	PUZ-HA36NHA	265	100
PLA-A42BA	PUY-A42NHA, PUZ-A42NHA	165	100
PCA-A24GA	PUY-A24NHA, PUZ-A24NHA	165	100
PCA-A30GA	PUYA30NHA, PUZA30NHA	165	100
PCA-A36GA	PUYA36NHA, PUZA36NHA	165	100
PCA-A42GA	PUYA42NHA, PUZA42NHA	165	100

*49' applies to installations in which the outdoor unit is installed below indoor unit.

OPTIONAL ACCESSORIES

PART NUMBER	USE WITH	DESCRIPTION
Controls		
MAC-397IF-E	M-Series Inverter Units	MA and contact terminal interface
MAC-399IF-E	M-Series Inverter Units	M-NET control adapter for Mr. Slim MSY and MSZ models
PAC-725AD	P-Series	Connector for CN51/multiple remote controller adapter and duct fan controller
PAC-715AD	P-Series	Connector for CN32 (For remote ON/OFF)
PAC-SE41TS-E	P-Series	Remote temperature sensor for indoor units
PAC-SA1ME-E	PLA-ABA	i-see™ sensor corner panel for PLA-ABA indoor units
PAC-SF40RM-E	P-Series	Remote operation adapter: display and ON/OFF
PAC-SF80MA-E	P-Series	M-NET control adapter for Mr. Slim PUY-A, PUZ-A, and PUZ-HA Models
PAC-SK52ST	P-Series	Control / service tool
PAR-21MAA-G	Use for wired M-Series Controller	Deluxe MA remote controller (Requires MAC-397IF-E)
PAR-SL99U-E	PCA	Wireless remote controller kit for PCA suspended units
PAR-FA32MA-E	PLA-ABA	Wireless remote controller for PLA-ABA units (Requires signal receiver PAR-SA9FA-E)
PAR-SA9FA-E	PLA-ABA	Wireless signal receiver for PLA-ABA units (For PAR-FA32MA-E controller)
PZ-41SLB-E	Lossnay®	Lossnay ERV remote controller for LGH ERV control
Low Ambient		
WB-PA1	P-Series	Wind baffle (1 piece) PUY/Z-A12/A18
WB-PA2	P-Series	Wind baffle (1 piece) PUY/Z-A24/A30/A36/A42 (42 installation requires 2 pieces); PUZ-HA36NA (Requires 2 pieces)
ICM-326HM-1	M-Series Non-Inverter units	Low ambient head pressure controller
Filters		
MAC-2300FT	M-Series Indoor Unit - A24	Anti-allergy enzyme filter
MAC-415FT	M-Series Indoor Unit - A09/A12/A15/A17	Anti-allergy enzyme filter
MAC-418FT	MSZ-FD09/12	Anti-allergy enzyme filter
MAC-308FT	MSZ-FD09/12	Platinum deodorizing filter
MAC-1415FT-E	M-Series Indoor Unit - D30/36	Anti-allergy enzyme filter
PAC-SE81KF-E	PCA	High-efficiency (MERV 10) filter element
PAC-SH59KF-E	PLA-ABA	High-efficiency (MERV 10) filter element (Requires PAC-SH53TM-E multi-function casement)
Pumps		
SI1730-230	P-Series	Mini-condensation pump: 230V
SI3100-115	MS-Series	Mini-condensation pump: 115V
SI3100-230	MSY/Z-Series	Mini-condensation pump: 230V
Miscellaneous		
TAZ-MS303	M-Series and P-Series	Three-pole disconnect switch; 30A, 600V; turns off power between indoor and outdoor units
CWMB1	MU and PU outdoor units	Condensing unit wall mounting brackets: painted steel
PAC-SH53TM-E	PLA-ABA	Multi-function casement (High-efficiency filter element not included)
PAC-SH51SP-E	PLA-ABA	Air outlet shutter plates (1 set = 2 pieces)
PAC-SG58SG-E	P-Series	Air outlet guide (1 piece) PUY/Z-A12/A18
PAC-SG59SG-E	P-Series	Air outlet guide (1 piece) PUY/Z-A24/A30/A36/A42 (42 installation requires 2 pieces); PUZ-HA36NA (Requires 2 pieces)
PAC-SG61DS-E	P-Series	Drain socket
MAC-851DS	MUZ-FD09/12	Drain socket
MAC-811DS	MUY(Z)-D30/36	Drain socket assembly
PAC-SG63DP-E	PUY(Z)-A12/18	Drain pan
PAC-SG64DP-E	PUY(Z)-A24/30/36/42 and PUZ-HA36	Drain pan
RCMKP1CB	M and P Series Wireless	Lockdown bracket for wireless remote controller
ULTRILITE1	All M-Series and PUZ(Y)-A12/18	Condensing unit mounting pad: 16" x 36" x 3"
ULTRILITE2	PUY(Z)-A24/30/36/42; PUZ-HA36	Condensing unit mounting pad: 24" x 42" x 3"
Port Adapters		
MAC-A454JP-E	MXZ-Series	Adapter: 3/8" x 1/2"
MAC-A455JP-E	MXZ-Series	Adapter: 1/2" x 3/8"
MAC-A456JP-E	MXZ-Series	Adapter: 1/2" x 5/8"
PAC-493PI	MXZ-Series	Adapter: 1/4" x 5/8"
PAC-SG76RJ-E	MXZ-Series	Adapter: 3/8" x 5/8"
MSDD-50SR-E	P-Series	Distribution pipe
PAC-SC84PI-E	PKA-Series (A24/30/36/42)	L-connector pipe (for left-side piping)

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Lineset Cover System

Put a professional finish on air conditioning installations with an easy-to-install modular system that beautifies exteriors and protects linesets, drainlines, and wiring.

- Available in four sizes: 2-1/4", 3", 4", and 6" tubes.
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DIAMONDBACK™

BV-Series Ball Valves

Model numbers:

BV14FFSI

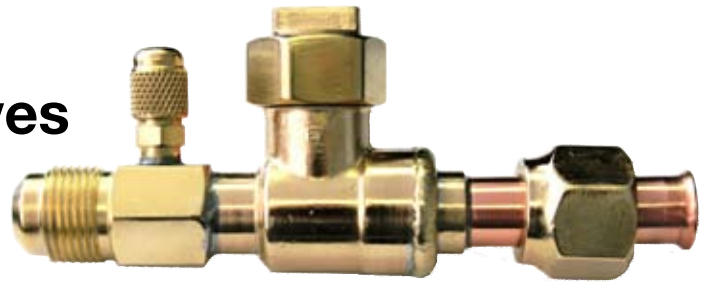
BV38FFSI

BV12FFSI

BV58FFSI



- Size available: 1/4", 3/8", 1/2", 5/8"
- Fully factory assembled
- Furnace brazed and pressure tested
- Each ball valve is equipped with Schrader Valve for refrigerant service
- Design working pressure: 700 PSIG
- Temperature range: -40° F to +325° F (-40° C to +149° C)
- Forged brass body and seal cap
- Teflon® seals and gaskets (no synthetic O-rings)
- Seal cap design permits valve operation without removal of seal cap
- Suitable for use with R-11, R-22, R-123, R-125, R-134A, R-236FA, R-4202A, R-402B, R-404A, R-407C, R-410A, R-500, R-502, and R-507
- One year limited materials and workmanship warranty on Ball Valves



- Engineered for Mini-split and Multi-split HVAC Units
- Full Port Design
- 700 PSIG Rated
- R-410A Compatible
- Flare Connections

Part Number	SAE Flare	A	B	C	D	E	F
BV14FFSI	1/4"	6.19	2.60	1.80	1.22	1.42	1.10
BV38FFSI	3/8"	6.30	2.67	1.80	1.22	1.42	1.10
BV12FFSI	1/2"	6.51	2.67	1.80	1.22	1.42	1.10
BV58FFSI	5/8"	6.64	2.67	1.80	1.28	1.42	1.10

*ball valves come with an insulation piece

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Mitsubishi Electric Shizuoka Works acquired ISO 9001 certification under Series 9000 of the International Standard Organization (ISO), based on a review of quality warranties for the production of air-conditioning equipment. The plant also acquired environmental management system standard ISO 14001 certification.



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*Hyper-Heating technology Patent Pending.

See complete warranty for terms, conditions and limitations. A copy is available from Mitsubishi Electric.

Form No. MBROGEN-11-08-10M-V3 PD

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